

**The Thematic and Methodological Approaches in
Master's Theses at Middle East University in Jordan**

التوجّهات الموضوعية والمنهجية في رسائل الماجستير
في جامعة الشرق الأوسط في الأردن

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**A Thesis Submitted in Partial Fulfillment of the
Requirements of the Master's Degree in Education
Curriculum and Teaching Methods**

**Department of Administration and Curriculum
Faculty of Educational Sciences
Middle East University**

June, 2021

Authorization

I, **Asalah Ahmad Abu Aser**, authorize The Middle East University Graduate Studies to supply a hard copy of my Thesis to libraries, establishments or individuals upon their request.

Name: Asalah Ahmad Abu Aser

Date: 20 / 6 / 2021.

Signature



Thesis Committee Decision

This thesis “**The Thematic and Methodological Approaches in master’s Theses at Middle East University in Jordan**”. was successfully defended and approved in June 2021.

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Declaration

I hereby declare that this thesis represents my own work which has been done after registration for the degree of Academic Administration and Curriculum at The Middle East University and has not been previously included in a thesis or dissertation submitted to this or any other institution for a degree, diploma or other qualifications.

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions. The work was done under the guidance and supervision of Dr. Ahmad Tabieh.

Asalah Ahmad Abu Aser

Acknowledgment

Thank God, in the past and the future ... Thank God who granted success to me, helped me to overcome adversity, and eased my difficulties. All praise is due to Allah, Lord of the worlds.

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I extend my heartfelt thanks to the measurement and evaluation professor in Jordan University, **Prof. Ferial Abu Awwad**, the external assessor to the results related to my methodological approaches, who did not withhold her plentiful knowledge, but shared it in a generous effort to help me. My supervisors and I owe her our sincere gratefulness.

Dedication

To grace, goodness, and to the hidden secret of my success. To **my dear father** who stood by me in every step of my life. I wish you longevity.

To **my mother**, who paved the way for me with her prayers and kindness. May Allah prolong your life.

To my backbone, **brothers and sisters**, may Allah protect you.

To **all those who supported and loved me...**

To **myself...**

I dedicate this humble work.

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The Thematic and Methodological Approaches in Master's Theses at Middle East University in Jordan

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Abstract

Master's theses at the Faculty of Educational Sciences follow a limited number of thematic and methodological This leads to thematic and methodological gaps which need to be identified to give direction to future research. The study used a qualitative methodology based on Content Analysis (Bibliometric Analysis) to present a quantitative description of the master's theses. Gapping analysis was used to identify the thematic and methodological gaps using a content analysis checklist that contained the thematic and methodological approaches of the specific field of curriculum and instruction. The study sample consisted of all completed master's theses in the Curriculumand instruction department, and they were 76. Analysis showed that the thematic approaches in the theses were oriented towards Curriculumevaluation and teaching-learning strategies, while the methodological approaches in the theses focused on the quantitative method in general with descriptive designs in specific. Other findings revealed that the majority of theses focused on random and stratified sampling; the data were collected using questionnaires, and these theses used descriptive statistics for data analysis. Referencing was concentrated in published papers and university theses. Content Analysis showed that there was a thematic gap in the studies that focus on analyzing and designing Curriculumwhile there were methodological gaps visible through least or no use of mixed-method;qualitative method, experimental and quasi-experimental designs, use of Cooper equations to check the reliability of instruments; and (ix) referencing using conference papers. Thus, the current study identifies the thematic and methodological gaps and recommends filling these to constructively add to the literature.

Keywords: Thematic Approaches, Methodological Approaches, Thematic Gaps, Methodological Gaps.

التوجهات الموضوعية والمنهجية في رسائل الماجستير

في جامعة الشرق الأوسط في الأردن

إعداد: أصالة أحمد أبو عصر

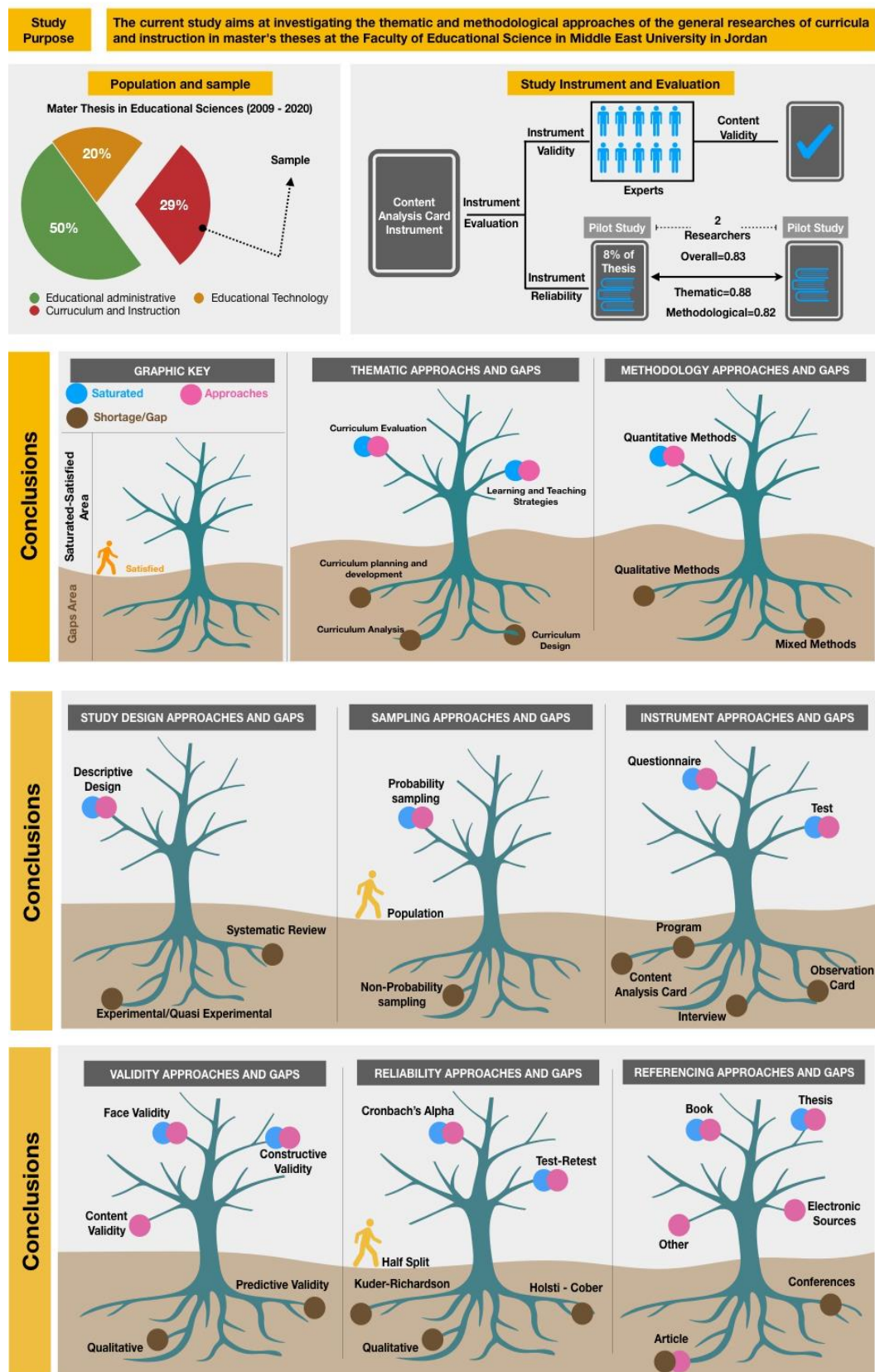
إشراف: الدكتور أحمد عبد السميع طبية

الملخص

هدفت الدراسة إلى رصد التوجهات الموضوعية والمنهجية وفجوات كل منها لرسائل الماجستير في جامعة الشرق الأوسط، عمان - الأردن. استخدمت الباحثة المنهج الكيفي القائم على تحليل المحتوى (التحليل البليومتري) ولتحقيق هدف الدراسة تم إعداد بطاقة تحليل محتوى تتضمن التوجهات الموضوعية والمنهجية لتخصص المناهج وطرق التدريس والتي تم التأكد من صدقها من خلال عرضها على مجموعة مستهدفة من أساتذة متخصصين في المناهج وطرق التدريس والقياس والتقويم في الجامعات الأردنية، تم إيجاد معامل الثبات باستخدام معادلة كوبر وقد أظهرت الأداة ثبات مقبول على مستوى التوجهات الموضوعية، التوجهات المنهجية والأداة ككل وبمعاملات ثبات (88٪، 82٪ و 83٪) على الترتيب. وتكونت عينة الدراسة من (76) رسالة لمرحلة الماجستير في قسم المناهج وطرق التدريس وقد أظهرت الدراسة توجهات الرسائل موضوعياً نحو تقويم المناهج وكذلك استراتيجيات التعلم والتعليم. أما توجهات الرسائل منهجياً فقد تركزت على المنهج الكمي عامة ذو التصاميم الوصفية خاصة، كما ركزت الرسائل في طرق معاينتها على المعايينات العشوائية والطبقية. أما فيما يخص أدوات جمع البيانات فقد توجهت الرسائل نحو الاستبيانات مع استخدام الصدق الظاهري والبنائي ومعامل ألفا كرونباخ لفحص صدق وثبات أدوات جمع البيانات. من جهة أخرى فإن غالبية المعالجات الإحصائية التي تم استخدامها تركزت في المعالجات الوصفية. أما التوثيق فقد تركز على الأوراق المنشورة والرسائل الجامعية. أظهرت الدراسة وجود فجوة موضوعية بالدراسات التي تركز على تحليل وتصميم المناهج. في استخدام المنهج المختلط والنوعي، الدراسات ذات التصاميم التجريبية وشبه التجريبية، طرق المعاينة غير الاحتمالية، استخدام الأدوات النوعية لجمع البيانات، ومعادلات هولستي وكوبر لفحص ثبات أدوات الدراسة والتوثيق باستخدام الأوراق البحثية المنشورة في المؤتمرات. وقد أوصت الدراسة بتوجيه الرسائل لسد الفجوات الموضوعية والمنهجية وبتنفيذ مثل هذه الدراسة في قسمي الإدارة التربوية وتكنولوجيا التعليم.

الكلمات المفتاحية: التوجهات الموضوعية، التوجهات المنهجية، الفجوة الموضوعية، الفجوة المنهجية.

Graphical Abstract



CHAPTER ONE

Background and Significance of the Study

Introduction

Scientific research is the cornerstone of societies' progress and development and an effective means of overcoming economic, health, political, social, and educational challenges that hinder the growth and prosperity of nations (Etikan & Bala, 2017). Developed countries have realized that scientific research is closely connected with national progress in all fields. So, they have rightly paid close attention to it and endeavored to support scientific research since it is a resource that is as important as other national wealth (lindi, krauss, schilcher, & Hilbert, 2020).

Educational research focuses on various domains, such as curriculum, educational practices, students' learning, education-social dynamics, education problems, and educational institution management. This is to direct the teacher's role in order to achieve educational goals (Pring, 2000; Al-Rumaidy, 2018).

Brokkamp and Wolters (2007) pointed out that the paramount aim of this type of research is advancing the teaching/learning process, providing education decision-makers curriculum designers and developers thorough knowledge which is taken from these research—then employing this knowledge in educational planning and policies to achieve goals that guarantee the progress of the teaching/learning process.

The most important of the domains as mentioned above of educational research are the research of curriculum and instruction (Smeyers & Depape, 2008). These research are the primary prop in identifying the practices that are part of educating the students. They also describe the efforts made to stimulate students' motivation in learning. These

practices are constantly being developed and polished by research in curriculum and instruction (Smeyers & Depape, 2008). The research of curriculum and instruction have managed to widely develop the educational curriculum and their evaluations and change the education techniques to suit learners' needs (Ary, et al., 2010).

However, as one of the scientific research fields, educational research plays a central role in the progress of a society since it investigates the behavior of the individual that interacts with the education system. If learning focuses pivotally on educating students, educational research aims at developing methods and techniques to advance the teaching/learning process (Varia, 2011; Brown, 2019).

It is worth mentioning that one of the primary prerequisites to pursue a postgraduate-studies program for students who major in the curriculum and instruction is conducting research specialized in one of the curriculum and instruction issues. The research should be in the form of a thesis, conducted according to methodological procedures and steps and related to one or more of the following sub-domains: teaching/learning process, educational curriculum, teaching methods, evaluation techniques, educational strategies, classroom environment, creative activities, non-classroom environment, etc. These theses are identified as basic, applied, qualitative, quantitative or labor research (Fan, 2020).

Based on the above, theses and dissertations submitted by post-graduate students, whether towards the award of MA or PhD degrees, are the primary support for educational research in general and the research of curriculum and instruction in specific (Lindl, et al., 2020). This is because they contain findings that enhance the educational literature and develop the teaching/learning process in the same manner.

Given that researching in the curriculum and instruction is methodological and accurate in monitoring the educational aspects and distinguishing each one's advantages,

it results in the researcher facing thematic and methodological challenges, such as data collection, its evaluation, measures and generalization (Lindl, et al., 2020). To achieve universality, it is necessary to diversify subjects, methodologies, and research techniques and not repeat them due to their pivotal importance in educational research, in general, and curriculum and instruction, in specific.

Since educational research are a national priority, Jordanian universities pay much attention to them; especially the Middle East University with its Department of Curriculum and Teaching Methods in the Faculty of Educational Sciences, given its drive to achieve its mission in excelling, pioneering, and providing its students with the required skills and orientation in the light of the latest educational updates and developments.

As the university theses and dissertations contain a scientific and practical value, this analytical study has been submitted to monitor the knowledge outcome of curriculum and instruction on the one hand and to disclose methodological and thematic approaches of those research apart from isolating thematic gaps to identify points of strength and weaknesses, on the other hand. This will help to form a vision that will bridge these study gaps, adapt them, and orient researchers to reasonable themes and research methodologies according to the worldwide requirements of educational research.

Study Problem

Although educational research widens in the curriculum and instruction domains, it faces challenges syncing with modernity and creativeness. It is also laden with a theoretical focus. It is not applicable since its research themes do not depend on local or international research priority except clear repetition in research, even if a research sample or community differs. So, searching for the reasons for these challenges facing

educational research and hindering its effectiveness is a must (Ponce & Manlondonado, 2016).

It is not possible to disclose these challenges unless analytical research are conducted to identify the methodological approaches and their themes and monitor the gaps in them. More to the point, they formulate a clear image about these research to refer to researchers and help them to select new and creative themes and methodologies to go with the methodological development in the worldwide educational research (Brown, 2019).

By generally looking at 10 master's theses in the curriculum and Instruction Program, it becomes clear that there is a repetition of one type of methodology and a lack of use of other methodologies, especially qualitative, since a large number of research focus on specific themes under the umbrella of the curriculum and instruction domain. Accordingly, this study analyzes research themes and methodologies to identify gaps and suggest recommendations for educational research on curriculum and instruction to orient them in the future, according to the unexplored themes and methodologies in the highest demand worldwide.

Study Purpose

The current study aims at investigating the thematic and methodological approaches of the general research of curriculum and instruction in master's theses at the Faculty of Educational Science in Middle East University in Jordan.

Study Questions

This study sought to answer the following questions:

- What are the thematic approaches of the master's theses that presented in curriculum and instruction during the period (2009-2020) at the Middle East University in Jordan?
- What are the methodological approaches of the master's theses that presented in curriculum and instruction during the period (2009-2020) at the Middle East University in Jordan?
- What are the thematic and methodological gaps of the master's theses that presented in curriculum and instruction during the period (2009-2020) at the Middle East University in Jordan?

Significance of the Study

The study presents a bird's eye view of the thematic and methodological approaches that researchers follow in the curriculum and instruction domain. Moreover, the study aims to monitor methodological and thematic gaps in curriculum and instruction research to suggest effective solutions to bridge those gaps .

This study shows the importance of analytical studies in improving the quality of educational research. It opens the way for similar studies and introduces the outcomes of curriculum and instruction research at Middle East University in Jordan. As a procedural significance, the study also introduces a methodology for other researchers conducting this type of analytical review in other educational majors.

Study Limitations and Delimitations

Study Delimitations

Content Delimitations: The theses are limited to the University theses to the master's degree program of the curriculum and instruction major at Middle East University, Jordan.

Geographical Delimitations: University theses discussed at the master's degree program of the curriculum and instruction major at Middle East University, Jordan during the period from 2009/2010 to 2019/2020).

Time Delimitations: The study will be applied through the second semester of the academic year 2020/2021.

Study Limitations

- Thematic and methodological content in the master's degree of the curriculum and instruction major from 2009/2010 to 2019/2020 at Middle East University.
- The extent of the methodological integrity used by researchers in the master's theses of the curriculum and instruction at Middle East University is regarded in selecting methodology, sample and sampling, data collection instruments, study referencing, and statistical process.
- Researcher accuracy in using the research methodology and data analysis

The Theoretical and Procedural Study Terms

Methodological Approaches: It is the methodology that should be used to study a theme. This methodology is identified according to the nature of the study problem or the problem that is addressed (Creswell, 2014). It could procedurally be defined as the content analysis of the master's theses in curriculum and instruction conducted at Middle East

University during the period from 2009/2010 to 2019/2020 in terms of methodology, sample and sampling, research instrument, research referencing and statistical processes and techniques.

Thematic Approaches: the general knowledge domains of the curriculum and instruction sector (Saraswathi & Stanly, 2018).

It could procedurally be defined as the content analysis of the master's theses in curriculum and instruction conducted at Middle East University during the period from 2009/2010 to 2019/2020 in terms of the general knowledge domains of this educational sector.

curriculum and Instruction Research: Curriculum is the content of what is being taught, and instruction is how the academic Curriculum is taught (Flake, 2017).

It could also be defined procedurally as: the Curriculum and instruction master's theses discussed at Middle East University from 2009/2010 to 2019/2020.

Content Analysis: It is a methodological research technique that provides a qualitative and quantitative analysis to a corpus of information. The content analysis introduces the types of content measured and sampling considerations to obtain specific research answers (Berg et al., 2009).

It could also be defined procedurally as the revision of all Curriculum and instruction master's theses discussed at Middle East University during the period from 2009/2010 to 2019/2020, and monitoring of the frequencies and percentages of the specific secondary domains of methodology, sample and sampling, data collection instruments and research referencing. Then, it studies the similarities and differences to bridge methodological gaps and concludes with suggesting recommendations.

Thematic Gaps: It is the difference in the ratio between the thematic approaches in curriculum and instruction research at the Middle East University compared to the thematic approaches standard

Methodological Gaps: It is the difference in the ratio between the methodological approaches in curriculum and instruction research at the Middle East University compared to the methodological approaches standard

CHAPTER TWO

Review of the Literature

The following chapter consists of three parts: Conceptual framework, theoretical framework, and Literature Review

Conceptual Framework

Figure (1) shows a conceptual map showing the relationship between thematic and methodological approaches. The researcher will process the variables, analyze them statistically, draw conclusions, and monitor the gap by comparing them with the reference standard (Scopus database) to develop results and recommendations according to this gap.

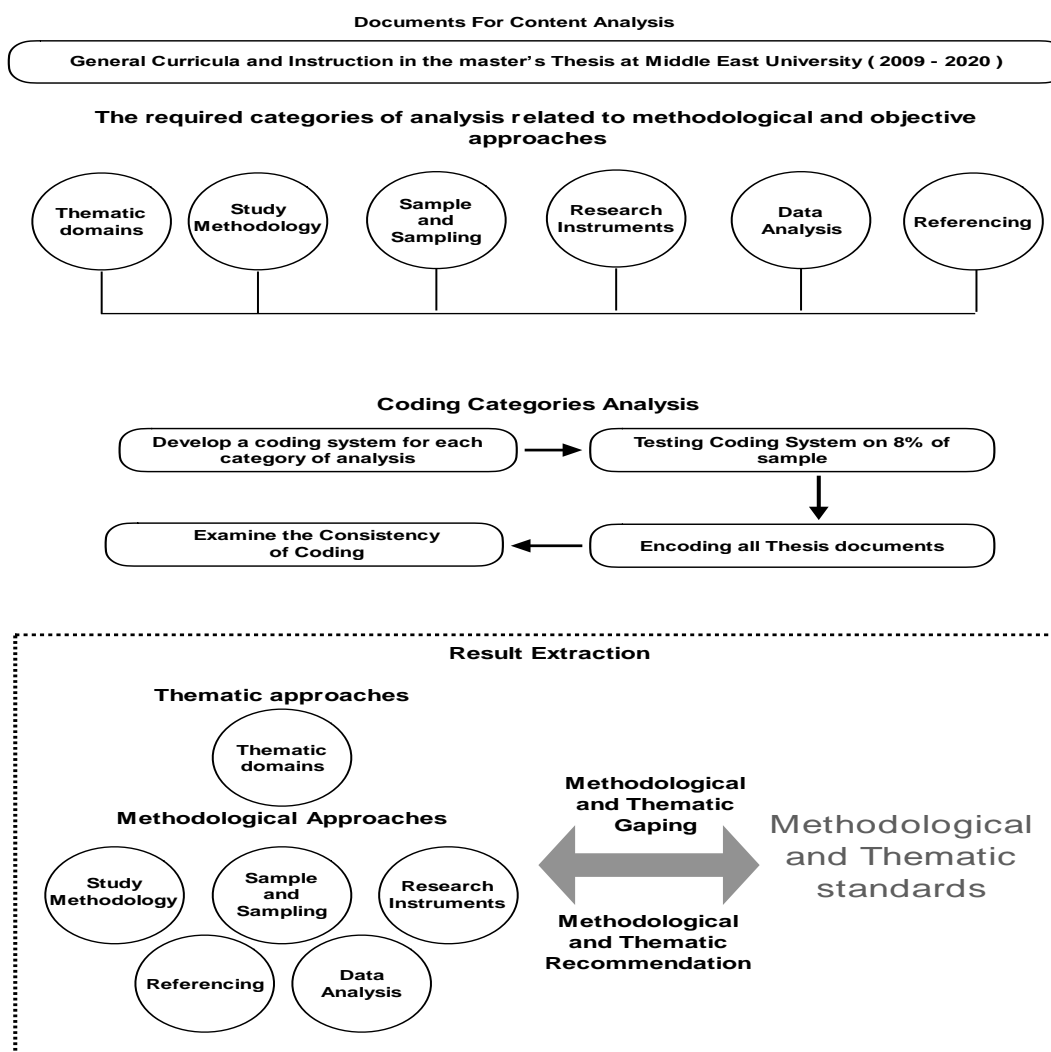


Fig 1. Conceptual Framework

Theoretical Framework

First Theme: The Educational Research and the Research of curriculum and instruction

The Concept of Educational Research: According to the American Educational Research Association (AERA), educational research is defined as the scientific domain that investigates the teaching/learning processes and the interactions that occur in educational institutions that lead to educational outcomes. It aims at developing the teaching process, (López-ALvarado, 2017).

UNESCO defined it as a research targetted at finding answers to specific questions related to educational curriculum, teachers, students, educational environment, classroom activities, non-classroom activities (extracurricular activities), teaching strategies and techniques, and so on.

Based on the above, educational research could be defined as all research activities that contribute to the advancement of the teaching/learning process and the adaptation of all available materials to serve the educational system. The primary goal of educational research is to make the teaching profession effective for the upcoming generations, vocational workers and citizens, and this in turn, will lead to the development of individual behavior (Ponce & Manldonado, 2016).

Characteristics of Educational Research: Wellington (2015) mentioned that educational research should be experimental wherein the results rely on real-world evidence taken from empirical data, cumulative where it depends on real facts and theories and help to develop and polish them, and verifiable since educational research is scientific research that is expected to lead to real outcomes.

(2014) Classify educational research as shown in Figure (2)

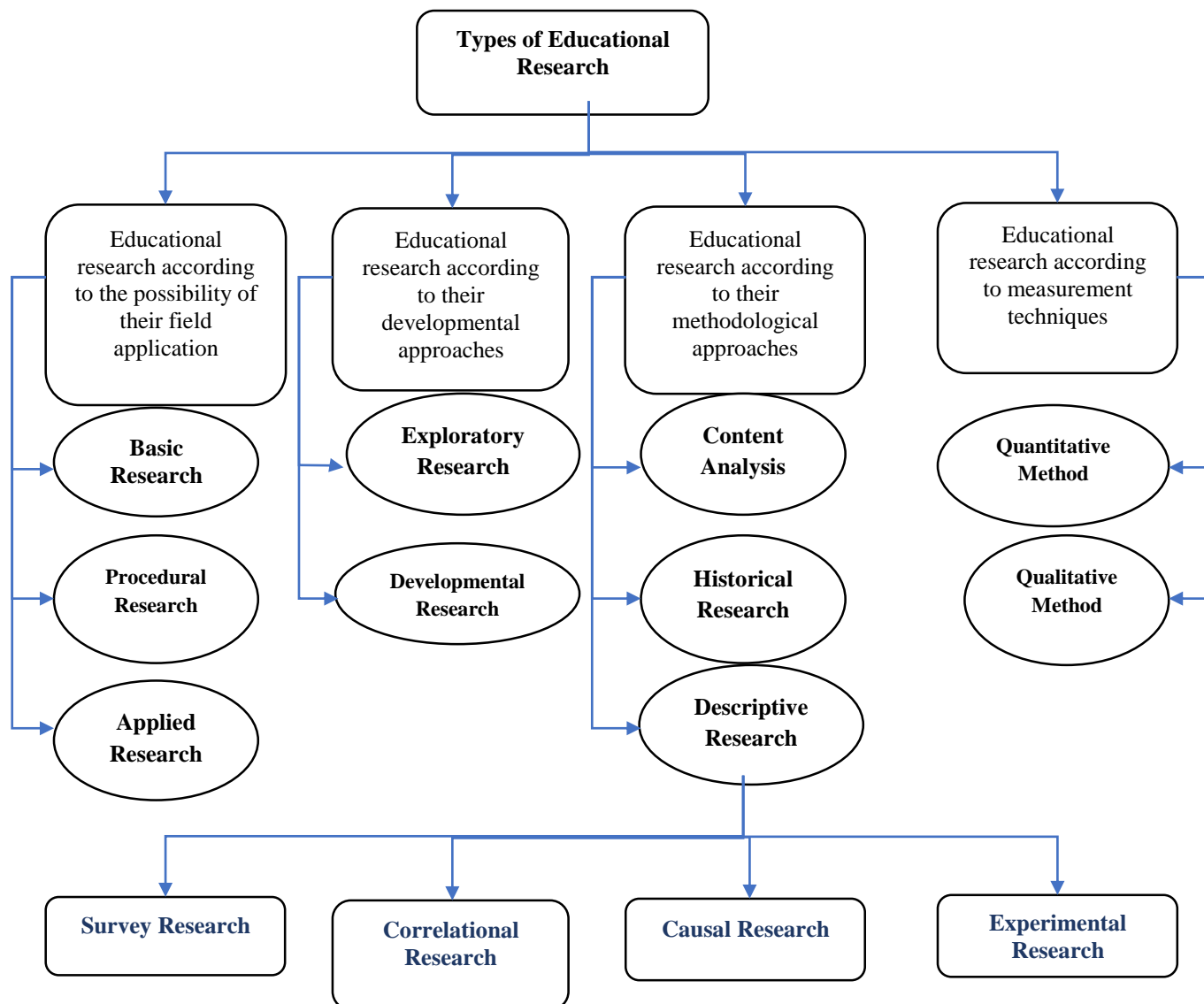


Figure 2. Classifications of Educational Research

The Classifications of Educational Research According to the Possibility of Their Field Application

- **Basic Research** through which experimental research develop new theories, and new facts explored through developing the knowledge domain. These research are impervious to the application side.

- **Procedural Research** through which problems are investigated, and the teaching process is developed and improved. However, this does not improve the knowledge. These are also called Labor Research or Research of Experimental Methodology (Bist, 2014).
- **Applied Research** through which the possibility of theories and generalizations is measured. It aims at finding solutions to problems related to education in the real world.

The Classification of Educational Research according to their Developmental Approaches

- **Exploratory Research** aims at exploring the domains related to education and knowledge organization and development.
- **Developmental Research** focuses on the interactions of variables to produce new knowledge instead of focusing on new data. These types of research are formative (since they evaluate the data about learning during their development aiming at editing and enhancing knowledge).

The Classifications of Educational Research According to Their Methodological Approaches

Content Analysis: The first use of content analysis was reported in Sweden in 1743. When political controversies arose around chorales (a hymn tune associated with German Lutheran Church), it was used to know the context and connotation. This is the origin of what is called today Content Analysis. However, from an academic perspective, content analysis, as a method, appeared in the early 20th century in Germany in various fields, including journalism and sociology. The content analysis method came to be used in disclosing the Nazi war propaganda by the US Intelligence Bureau by understanding the meanings, contexts, and phrases connoted in the propaganda (Krippendorff, 2018). For

years in succession, content analysis becomes an effective method of disclosing trends, connotations, and text content in different contexts. Based on Krippendorff (2018), the content analysis contains the following steps:

- Starting from a question or a hypothesis according to available data
- Selecting the analysis sample
- Specifying time framework and categories coding (encryption)
- Training developers to guarantee coding reliability
- Analyzing and explaining data to reach results

German sociologist, Max Weber (1864- 1920), used the content analysis technique to explore the content of newspaper articles. Teny, a leading journalist of his time, also used the content analysis method to analyze political trends for national and regional interests introduced in the 1913 journalism.

Frey (2018) defined content analysis as a methodological technique used in quantitative and qualitative methods leading to data explanation in an abstractive way. Bixter (2020) defined content analysis as a scientific methodology to understand human communication, including political documents, mass media, and messages. Content analysis segments texts into smaller units, such as phrases, sentences, paragraphs, and single words and collects these units according to common characteristics and meanings. At first, the content analysis technique was used as a method for quantitative research. Then, it came to be used as a method for qualitative research or both qualitative and quantitative research. This technique in the qualitative method has managed to process quantitative research gaps since the qualitative method enables introducing an in-depth and detailed description of content through data preparation, encryption and explanation,

then, validating current theories and developing them. This technique is economical and applicable to qualitative and quantitative research in the same manner.

Content analysis is divided into two types; the first is a conceptual analysis that deals with the analysis of concepts, and the second is an intellectual analysis that deals with the concept of relation analysis.

Historical Research: It provides an analysis of events that occurred and situations that happened in the past to explain the origins and content of the current events and situations (Buckley, 2016). For example, a study monitors the development of the Pre-Service Teacher Training Program to identify the historical origin of these programs.

Descriptive Research: It is a research that presents data about current events, circumstances and situations. It includes several types as mentioned by Nassaji (2015):

- Survey Research in which data is collected in a pre-determined form to determine mutual relations between variables.
- Correlational Research through which relations between variables are looked for by different measurements of statistical correlations.
- Causal Research that aims at searching for causal relations between variables through monitoring existing phenomena, then searching again through available data.
- Experimental Research that aims at distinguishing effects on other variables through manipulating the variables that determine one or more causes methodologically (Cash, et al., 2016).

The Classifications of Educational Research according to Measurement Techniques used

Research is classified according to the measurement methods used into two types:

Quantitative research that relies on questionnaires and tests in collecting data that

focuses on numbers in analyzing and understanding data. **Qualitative research** is based on field observations and open-ended interviews to collect data from participants (Berg & Haward, 2012), which gives data about real situations and people and provides a comprehensive understanding of behavior (Devaus, 2014).

The Research of curriculum and instruction

Curriculum are of great significance in societies since they go into the development of national culture. Based on that, the research of Curriculum are important to monitor school teaching processes and results for students, qualify the educational system and develop it in various cultures and systems (Kulm & Li, 2009).

Themes of Curriculum and Instruction Research

Kozikoglo and Senemoglo (2015) classified the research of Curriculum and instruction into main domains, including Curriculum and teaching methods, learning techniques, different instruction, secondary and elementary education curriculum, higher education and vocational education curriculum, teaching/learning strategies, reading strategies, teacher training program evaluation, in-service training, comparative analysis of teacher training Curriculum and practices, teachers' efficiencies, teacher training policies, model proposals for teacher training, thinking skills, critical and reflective thinking, education and information technology, including distance education (E-Learning) and education multimedia, education curriculum's evaluation and curriculum development studies.

Second Theme: The Methodological Approaches of the Educational Research

Methodology and Data Collection Instruments: Maheshwari (2017) defined research methodology as the plan the researcher follows to address the study problem and the general framework of procedures that the researcher applies in their research. It

describes how the research is conducted. Research are classified according to their research methodology which includes historical, experimental and descriptive research with the later containing correlational, causal and survey research.

Qualitative Method: Jackson, et al., (2007) mentioned that the qualitative method provides textual, verbal, or visual data and analyzes it using themes and patterns coding and then, classifies it. It includes:

1. Interviews: They provide prompt responses, and participants are more willing to provide data. In this instrument type, the researcher is requested to be more accurate and skilled for fear of bias (Nassaji, 2015). They provide an in-depth understanding of themes and consist of pivotal phrases that are code-able and classifiable. Berg and Haward (2012) classified interviews as:
 - a. Unstructured Interview: through which issues are explored via individual interactions. It is an in-depth interview in which questions are not prepared.
 - b. Semi-structured Interview: in which questions have a determined focus. It is an intensive interview where the researcher's role is to direct the respondent to answer within the defined focuses.
 - c. Structured Interview: in which questions are pre-determined. The researcher interviews the individuals and asks the pre-determined questions in the same order. This interview type is more formal than the unstructured and semi-structured interviews, less biased, and allows the generalization of the results.
2. Focus Group: A group of individuals that have the same study major. Their roles are to explore a specific theme and measure its availability possibility.
3. Case Study: It is an in-depth study of an individual, a group of individuals, an activity or a process, and the exploration of rare phenomena.

4. Observation: The researcher makes a field observation of individual behavior and collects data by observing specific indicators. Parveen and Showkat (2007) categorized the observation into :

- a. Participant Observation: The researcher is part of the group being studied to better understand the themes.
- b. Non-Participant Observation: The researcher is not part of the group being studied.

Quantitative Method: Yilmaz (2014) classified the quantitative research as follows:

- Survey Research: It collects data in a pre-determined form to determine the mutual relations between variables, for example, closed questions, such as questionnaires and tests.
- Experimental Research: It measures the cause and the result by controlling one independent variable. It includes:
 - a. Experimental Design: in which a control group is designed randomly.
 - b. Semi-Experimental Design: in which participants are not chosen randomly.
 - c. Non-Experimental Design: it does not have control groups.

Mixed Method: it is collecting various instruments of data, including qualitative and quantitative methods (Norwegian Educational Research towards 2020 – Utdanning 2020). Figure (3) shows the classifications according to their research methodology.



Figure 3. Research classifications according to their research methodology

Sample and Sampling: Sometimes, researchers are unable to collect data and information from all society members. In such a situation, they have the recourse to collect data and information from a group smaller than the population in a way that makes the collected data and information represent the population. This group is called a sample (Cohen, et al., 2019).

Taherdoost (2016) stated that sampling should be started by (i) Defining the target population clearly; (ii) Specifying the sampling frame as it should represent the population; (iii) Specifying the sampling technique; (iv) Determining sample size; (v) Collecting data; and (vi) Evaluating the individuals' response rate.

Sampling Methods: Sampling (selecting samples) depends on population, number of variables, factor diversity and accuracy (Cohen, et al., 2019). There are two main methods for sampling:

- **Probability Sample:** The chance of selecting individuals for the sample is known, and each individual has a chance of being included in the sample.
- **Non-Probability Sample:** The chance of selecting individuals for the sample is unknown, and the population does not have an equal chance of being included in the sample. Table (1) shows the types of sampling:

Table 1. The Types of Sample

Probability Sample	Non-Probability Sample
Simple Random Sample	Convenience Sample (Ease to access)
Systematic Sample	Sequential Sample
Stratified Sample	Quota Sample
Cluster Sample	Judgmental Sample
Single-Stage Sample	Snowball Sample
Multi-Stage Sample	

Types of Probability Sample: Etikan & Bala (2017) classify these as,

- a. Simple Random Sample: Each individual has an equal chance of being included in the sample. Individuals are selected randomly using a random number table outlined in the matrix.
- b. Systematic Sample: It is a form of simple random sample forms. Sample individuals are selected systematically rather than randomly.
- c. Stratified Sample: The population is divided into homogeneous groups. Each group includes homogeneous characteristics. Samples are taken from these distributed strata (groups).
- d. Cluster Sample: This type is used when the population is large and divided into geographically different places. A specific sample is selected to represent the rest of the population.
- e. Single-Stage Sample: It is an extension to a cluster sample. A sample is selected in stages using the large population. For example, they select directorates, then a number of schools, then a school, then multiple classrooms, then one classroom, and then a number of students.
- f. Multi-Stage Sample: It follows the single-stage sample, but the research purpose is changed at each stage.

Types of Non-Probability Sample: Mohsin (2016) classifies these as,

- a. Convenience Sample: It depends on selecting the easy-to-reach individuals as respondents for taking samples.
- b. Sequential Sample: It is like convenience sampling, but the researcher selects an individual or a group from the sample, conducts research, analyzes results, and then moves to another group.
- c. Quota Sample: In this sample, the researcher cares for a specific category of population and divides the population into categories.
- d. Judgmental Sample: The researcher selects specific individuals by themselves that they find suitable to participate in the sample. In this sample type, the researcher's pre-knowledge could affect the validity of the result.
- e. Snowball Sample: This sample type helps in reaching samples that are unapproachable. It is used when the population is small and is not easy to reach.

Research Referencing: While conducting scientific research, especially educational, the researcher should reference what they have read and cite those references in their research, ensuring scientific integrity and avoiding academic plagiarism. This process is called "Referencing" and follows are parts of multiple styles:

British Standards – Harvard Referencing Style (Molly, 2020)

- *Books In-Text Citations*
 - a. If the quotation is word for word, the researcher puts quotation marks around the quoted phrase and writes the author's surname, the year of publication, and the page number between brackets.
 - b. If the quotation is indirect (rephrased), the researcher writes the phrase followed by the author's surname, the year of publication and the page number between brackets.

- c. If there are multiple authors, the researcher writes each author's surname, along with the year of publication and the page number in brackets.
- d. If the name of the book is written in the body text, it should not be written again in the in-text citation (the year of publication and the page number).
- e. If the quotation is taken from articles or scholarly journals, the author and the year of publication are written between brackets.

- *In Reference List*

- For books: author's surname, author's name, year of publication, title of publication, edition and volume.
- For scholarly articles: author's surname, author's name, year of publication, title of article, date website accessed.

MLA Style (Western Sydney University, 2019)

- A reference with an author: author's surname, author's first name, title of book, publisher, year of publication.
- A reference with more than one author: first author's surname, first author's name, second author's name, title of book, place of publication, year of publication.
- Scholarly articles: author's surname, author's name, journal's owner, "title of article" title of journal, year of publication, volume, pages.

The APA (American Psychological Association) Style (Western Sydney University, 2019)

- ❖ The same previous method is followed while writing in-text citations. However, in the reference list, a reference is written as follows:

Author's surname, author's first name's initial, author's middle name's initial
(year of publication). Title of book (five spaces) rest of book title_ (Edition). Place
of publication: publisher.

Statistical Process Techniques: Figure (4) shows statistical processes classifications

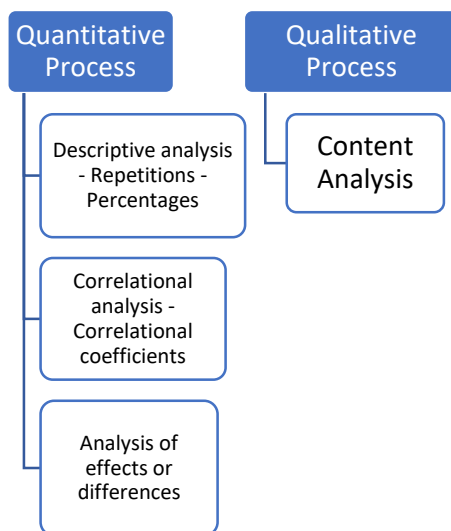


Figure 4. Statistical Techniques According to Their Statistical Processes

Research Gap: It is the themes in which data is little and does not provide a full answer to the study question. Robinson, et al., (2011) pointed out that research gap arises from the limited ability of methodological references to conclude and is considered a gateway to new research themes. Miles (2017) classified research gaps, as shown in Figure (5). Research gap is also the theme of the current research. The methodological gap is known to be the gap that describes the effect of followed methodological styles on the results of previous studies. It introduces a new path for research whose methodologies and styles differ from previous studies (Muller, et al., 2014).

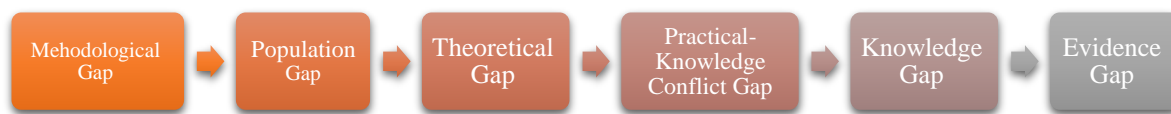


Figure 5. Classifications of Research Gaps

Literature Review

The following section presents a summary of other studies on approaches and methodologies in master's thesis across universities.

Al-Kathiri (2002) made an attempt to disclose the characteristics of approved master's theses in the Department of Curriculum and Instruction at the Faculty of Education from 1983 to 2001 AD. The research sample contained 240 master's theses in six fields: the instruction of Sharia (forensic) sciences, the Arabic language, sciences, social studies, mathematics, and general curricula. The results showed that the research were focused on the evaluation, application, and development of the curricula. They also showed that the descriptive survey method was the most common one, followed by content analysis and semi-experimental methods. 52% of the researchers used questionnaires, followed by 32% that used tests, 22% used referencing analysis, and 5% observation. Interview as an instrument was not used in these research.

Salem and EL-Bisher, (2005) conducted a study to reveal the approaches of the scientific research in the field of the Sharia instruction approved during the period from 1986 – 2004 AD. The study sample contained 45 master's theses, and the researcher used content analysis. The results showed that curriculum subjects and educational books were the most-researched ones, followed by teaching, student,

educational supervisor, teacher, educational evaluation, educational activities, and curricula, in that order. The results also showed that the descriptive survey method was dominant, followed by content analysis and experimental curricula. However, the most-used instruments were questionnaires, tests, and then the content analysis checklist. None of the studies used interviews or observation as instruments.

Al-Shaie, (2007) investigated the approaches and characteristics of the master's theses in practical education approved by the Faculty of Education at King Saud University during the period from 1426 to 1427 AH. The researcher used content analysis on a sample of 94 master's theses and the results showed domination of descriptive survey, experimental and content analysis methods. The instruments used were achievement tests, questionnaires, content analysis checklists, and then standardized measurements. According to sample and sampling, the whole population sample was the most-used sample, followed by purposive sample, stratified random sample, cluster sample, simple random sample and then regular random sample.

Al-Omary and El-Nawafleh, (2011) aimed at disclosing the reality of Practical Education in Jordan from the period from 2000 to 2009 AD through analyzing the summaries of 188 theses and 40 published research published in precise periodicals issued from Jordanian universities. The results showed that the approach of these research was on the fields of teaching and learning with the focus on teaching strategies. The results also showed the primacy of experimental research, followed by descriptive, comparative causal, correlational and lastly, historical.

Goktas et al., (2012) monitored the approaches of the research papers published in the teaching field from 2005 to 2009 in SSCL and ULAKBIM. Content analysis was

used to analyze 2115 theses published in Turkish journals. The results showed that most of the studies were connected with educational technology, teaching sciences, guidance and teaching mathematics. Quantitative studies were dominant in educational research. The instruments used to collect data were the quantitative methods and descriptive analysis methods. The most-studied samples were university students and teachers.

Chaiyasook and Jaroongkongdoch, (2014) investigated the current approaches of research themes in teaching English language in seven Thai universities. The sample contained 194 master's theses and used the content analysis method. The results showed the theses turning to the quantitative method. The sample targeted by researchers comprised students. The most-used instrument was a questionnaire and it showed that researchers' focus was turning to student performance.

Al-Astal, (2015) conducted a study entitled "The trends of curriculum and instruction research in post-graduate studies in Palestinian universities" which aimed to determine the approaches of the research of Curriculum and instruction in the conducted post-graduate studies in Palestinian universities during the period from 2000 to 2013. The sample contained 320 master's theses in which the researcher used the bibliometric analysis methodology. The results showed that the quantitative research are lead at a rate of 97.19%, 1.87% for qualitative research and 0.94% for mixed research. Two instruments were mostly used to collect data with a rate of 46.56%. However, one instrument was used at a rate of 35.1% and three instruments or more were used at a rate of 18.13%. The methods of choosing a sample were 70.62 for non-random sample, 25.63 for the sample that used the whole population, and 3.75 for the random sample.

Beldage, (2016) analyzed the higher-education dissertations about the approaches of the valuable teaching research in Turkey. The researcher used content analysis of 126 research dissertations published between 1999 and 2015. The results showed that the qualitative methods and surveys were the most common ones. Most of the research tended to use random samples.

Egmir, et al., (2017) analyzed the studies published at the International Journal of Instruction (IJI). The researchers analyzed the studies published during the period from 2007 to 2017 AD and used the content analysis method. The results showed that most-researched themes were studies in the field of teaching. This study used the quantitative method. The sample was random and less than 500 and the measurements were the data collection instruments. The data were analyzed using descriptive statistics.

Erdogan, (2017) scrutinized the research approaches in dissertations specialized in studying teaching, which is based on solving the problems published in the national database of the Council of Higher Education in Turkey. The researcher analyzed 101 master's and Ph.D. theses and dissertations through which he concluded that the most-researched themes were teaching sciences and social studies. The results showed that most of the samples were primary students; a quantitative method was the most used, followed by the mixed and the experimental design.

Bunyamin, et al., (2017) conducted a study to determine the approaches of the research of sciences in Malaysia through the higher-education dissertations and the publications in national journals during the period from 2011 – 2016 AD. The content analysis methodology was trusted to reach results that showed that the research of teaching strategies were the most researched. Furthermore, semi-experimental and

descriptive research designs were the most common ones with a noted rise in the studies of the quantitative and mixed methods.

Al-Rumaidy (2018) aimed to disclose the educational research approaches in master's theses in the fundamental of education and educational management majors at the Faculty of Education, Kuwait University. The sample comprised master's theses discussed from 2007 to 2017 with a total number of 153 theses. The researcher used content analysis and the results showed that the school system and school management themes were the most-researched theme. The dominant research approach was the quantitative approach. Most of the theses followed the descriptive methodology and the random method and the questionnaire were the most-used instruments. However, Arabic references ranged between 31 and 60 and foreign ones ranged between 6 and 15.

Hells and Jalambo, (2019) carried out a study that aimed to identify the approaches of the educational, scientific research for post-graduate students at the Faculty of Education at the Islamic University during the period from 2019 to 202. The two researchers used the bibliometric methodology to measure and analyze the intellectual outcome. The results showed that the domain of Curriculumand instruction was the most researched compared to the fundamentals of education and psychology. The study further showed that educational researchers experience a shortage in the literacy and learning difficulties domains.

Al-Hareth and Al-Shahhri (2019) aimed to identify the methodological approaches of the research of general Curriculumand instruction in the masters and PhD theses and dissertations at King Khalid University from 2007 to 2017 AD. The research sample consisted of 134 students. The researchers used the methodology of content

analysis. The results showed the domination of the experimental methodology in the research followed by the descriptive methodology. In the research, the size of the male sample exceeded that of the females.

ALArfaj, et al., (2019) studied the research fields and characteristics approved by the Department of General Curriculum and Instruction, Faculty of Education, King Saud University. The study sample contained all discussed master's and PhD theses and dissertations with a total number of 65; 47 of which were master's theses and 18 were PhD dissertations. The researchers used descriptive methodology and content analysis. The results showed that the field of determining problems and hindrances was the most-researched one in master's theses and the field of academic achievement development the most-researched one in PhD dissertations. Furthermore, they showed a shortage in developmental and evaluation-related master's theses. In addition, the results showed the domination of the descriptive and semi-experimental methodologies and the lack of qualitative methodology. Regarding the instruments, the observation card was the most used. The numbers and categories of research population were one category and one instrument in most of the master's theses and were three categories and three instruments in PhD dissertations.

Topal (2020) investigated education and disability research in Turkey. The researcher analyzed 72 studies conducted by Turkish researchers during the period from 2007 to 2017 and published in national and international databases. The researcher followed the methodology of content analysis to determine that the experimental methodology was a frequently used methodology in these research and

the observation. The interview was the most popular instrument. In these research, random samples had been used, and quantitative analysis had been undertaken.

Gapping Table

Table (2) explains what distinguishes the current study from previous studies.

Table 2. Gapping table

Study Title	Purpose	Sample and Sampling	Methodology
Approaches of the research in the fields of education and disability in Turkey	A survey of the research that are conducted in the domains of disability and education in Turkey	Published research in the domains of disability and education in national and international databases between 2007-2017	Content analysis
Gap	Methodological and thematic approaches in Curriculumand instruction Domains	master's theses at Middle East University during 2014-2019	Bibliometric Analytics
Scientific research approaches for post-graduate students at the Faculty of Education at the Islamic University	Identifying the scientific research approaches at the Faculty of Education at the Islamic University	Master and PhD theses and dissertations during the period from 2019-2020.	Bibliometric methodology
Gap	Methodological and thematic approaches in Curriculumand instruction Domains	master's theses at Middle East University during 2014-2019	No Differences

Study Title	Purpose	Sample and Sampling	Methodology
Methodological approaches of the approaches of general Curriculumand instruction in the master and PhD theses and dissertations at King Khalid University	Identifying the methodological approaches of the research of Curriculumand instruction in master and PhD theses and dissertations at King Khalid University through the research methodology, research instruments, sample and sampling and methodological gap.	All master and PhD theses and dissertations in Curriculumand instruction discussed at King Khalid University during the period from 2007-2017	Content Analysis
Gap	Thematic approaches in Curriculumand instruction Domains	master's theses at Middle East University during 2014-2019	Bibliometric Analytics
Fields and characteristics of master and PhD theses and dissertations at the Department of Curriculum and Instruction, General Curriculum Section at Faculty of Education, King Saud University	Identifying the research fields in master and PhD theses and dissertations at the Department of Curriculum and Instruction at King Saud University through the explored fields, research population category, the educational stage on which the research was conducted and research instrument and number	All master and PhD theses and dissertations in general Curriculumand instruction discussed at King Saud University during the period from 2011-2017	Content Analysis
Gap	Methodological Approaches related to Referencing and Statistical process techniques	master's theses at Middle East University during 2014-2019	Bibliometric Analytics

Study Title	Purpose	Sample and Sampling	Methodology
Approaches of the educational research in the master's theses in the fundamental education and education management majors at the Faculty of Education at Kuwait University	Disclosure of educational research approaches in master's theses of the fundamental education and education management majors through monitoring the researcher's data, their academic field, research methodology, sample, instrument and number of used references	Master's theses in the field of the fundamental education at Kuwait university discussed during the period from 2007 to 2017	Content Analysis
Gap	Thematic and Methodological Approaches (Statistical process techniques) of the theses of Curriculum and instruction	master's theses at Middle East University during 2014-2019	Bibliometric Analytics
Educational research approaches of the studies published in the International Journal of Instruction IJI: content analyses	Analysis of the studies published in the International Journal of Instruction IJI	The studies published in the International Journal of Instruction during the period from 2007 to 2017	Content Analysis
Gap	Thematic and Methodological Approaches (Statistical process techniques and Referencing) of the Theses of Curriculum and instruction	master's theses at Middle East University during 2014-2019	Bibliometric Analytics

Study Title	Purpose	Sample and Sampling	Methodology
Research approaches in the theses specialized in studying education based on solving the problems published in the national database of the Council of Higher Education in Turkey	Identifying the research approaches in the theses based on solving the problems published in the national database of the Council of Higher Education in Turkey	Research sample contained 101 master and PhD theses and dissertations published in the national database of the Council of Higher Education in Turkey	Content Analysis
Gap	Methodological and thematic approaches in Curriculumand instruction Domains	112 master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics
Sciences research approaches in Malaysia: content analysis	Identifying sciences research approaches in Malaysia through the higher education dissertations, the publications in journals and the local books	Research of teaching sciences in the higher education dissertations, the publications in journals and the local books between 2011-2016	Content Analysis
Gap	Methodological and thematic approaches in Curriculumand instruction Domains during master theses	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics

Study Title	Purpose	Sample and Sampling	Methodology
The valuable education research approach in Turkey	This study aims at monitoring the valuable research approaches in postgraduate dissertations in Turkey	The sample contained all the postgraduate research in teaching during the period from 1999 to 2015	Content Analysis
Gap	Methodological and thematic approaches in Curriculumand instruction Domains	Thematic and Methodological Approaches (Statistical process techniques and Referencing) of the Theses of Curriculumand instruction	Bibliometric Analytics
Approaches of Curriculumand instruction research in higher education at the Palestinian universities	Identification the approaches of Curriculumand instruction research in higher education at the Palestinian universities through research fields, research variables, used research type, sample, data collection instruments and used statistical methods	Completed postgraduate theses during the period from 2000 to 2013	Bibliometric methodology
Gap	Methodological Approaches (Referencing) of the Theses of Curriculumand instruction	Thematic and Methodological Approaches (Statistical process techniques and Referencing) of the Theses of Curriculumand instruction	No differences

Study Title	Purpose	Sample and Sampling	Methodology
Research approaches in master's theses in the field of teaching the English language in seven Thai universities	Monitoring the approaches of the current research themes in the field of teaching the English language in seven Thai universities	194 master's theses	Content Analysis
Gap	Methodological approaches in Curriculum and instruction Domains	112 master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics
Approaches of the education research in Turkey	Identifying the approaches of the published research papers in the field of education in the Turkish journals	Research papers published in the Turkish educational journals during the period from 2005 to 2009	Content Analysis
Gap	Methodological and thematic approaches in Curriculum and instruction Domains	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics
The reality of research in practical education in Jordan	Identifying the reality of research in practical education in Jordan through identifying research fields and research types and categories used in those research	Educational research published in well-established periodicals issued by the Jordanian universities during the period from 2000 to 2009	Content Analysis

Study Title	Purpose	Sample and Sampling	Methodology
Gap	Methodological approaches (Sampling, Referencing, Instrument and Statistical process techniques) in Curriculumand instruction Domains	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics
Approaches and characteristics of master's theses in practical education approved by the Faculty of Education at King Saud University	The disclosure of the characteristics of master's theses in terms of the sample, research instruments and used statistical methods	Master's theses approved by the Faculty of Education, King Saud University during the period from 1984 to 2005	Content Analysis
Gap	Thematic and Methodological approaches (Referencing) in Curriculumand instruction Domains	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics
Scientific research approach in the field of teaching the sharia (forensic) sciences in master at King Saud university	Monitoring scientific research approaches of the sharia (forensic) sciences in master's theses at King Saud University through the disclosure of sample, research methodology, and sampling instruments	Approved master's theses in research of the sharia (forensic) sciences in master during the period from 1986 to 2004	Content Analysis
Gap	Thematic and Methodological approaches (Referencing) in Curriculumand instruction Domains	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics

Study Title	Purpose	Sample and Sampling	Methodology
Characteristics of master's theses in the field of Curriculum and instruction at the Faculty of Education, King Saud University	Characteristics of master's theses at the Faculty of Education, King Saud University	Master's theses in approved Curriculum and instruction during the period from 1983 to 2001	Content Analysis
Gap	Thematic and Methodological approaches (Referencing and Statistical process techniques) in Curriculum and instruction Domains	master's theses at Middle East University in Jordan during 2014-2019	Bibliometric Analytics

CHAPTER THREE

Methodology and Procedures

Study Design

The qualitative methodology was used in this study based on content analysis (bibliometric analysis) to present a quantitative description of the master's theses research in Curriculum and instruction based on the methodological and thematic approaches specified in this study. Gapping analysis was used to identify the thematic and methodological gaps.

Sample and Sampling

Study population contains all master's theses prepared by post-graduate students with the Curriculum and instruction major at the Faculty of Educational Sciences at Middle East University and conducted during (2009/2010 – 2019/2020). The total number of conducted research obtained during the period from 2009 to 2020 is (76) master's theses. The researchers applied this study on all specified theses as there is no hindrance in obtaining electronic versions of these theses. Figure 6 show the distribution of sample according to theses year.

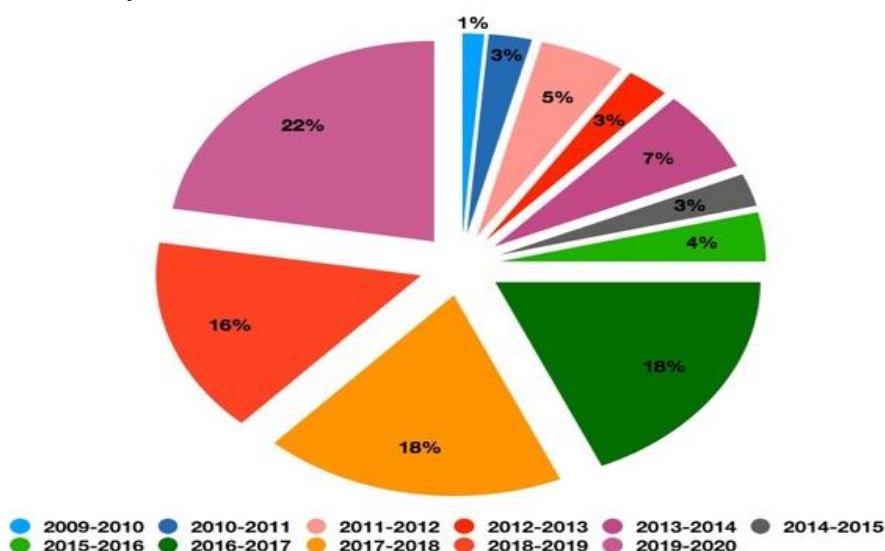


Fig 6. Sample Distribution

Study Instruments

The study instrument is content analysis checklist of the master's theses in Curriculum and instruction at Middle East University. The researcher determined the card domains and its variables based on reading the related previous studies, such as (Al-Omary & El-Nawafleh, 2011; Al-Othman, 2016; Al-Motham, 2008; Safford & Rotondo, 2001) in addition to some books in educational research, such as (Abo Allam, 2006; Al-Batsh & Abo-Zeineh, 2007; Campbell & Stanley, 1963). The card was then prepared in its initial form. Table (3) shows the characteristics of the content analysis checklist (Appendix A).

Table3. The characteristics of the content analysis checklist

Axes	Domain		Theme	Indicators
	Code	Domain		
Thematic Approaches	TS	Curriculum and Instruction	Teaching Curriculum Stages	4
	TC		Cognitive Themes	5
Methodological Approaches	M1	Methodology	Variables	2
			Methodology	3
			Research Design	3
	M2	Population and Sampling	Population	7
			Sample	6
			Sampling	3
	M3	Research Instruments	Instruments Number	3
			Instruments Source	3
			Execution Way	2
			Instrument Type	7
			Instrument Evaluation	2
	M4	Data Analysis		2
	M5	Referencing	Referencing Language	3
			Referencing Style	4
			Referencing Type	6

Validity and Reliability of Study Instruments

The validity of content analysis checklist: After creating the content analysis checklist in its initial form, content validity was checked by presenting the card's thematic part to five university professors specialized in Curriculum and instruction to verify the thematic domains and their inclusiveness to all Curriculum and instruction sectors. The methodological part was presented to two professors who specialized in measurements and evaluation and adjusted according to the professors' comments. Finally, based on the committee's opinions and suggestions, the card was redesigned to take its final form.

The Reliability of content analysis checklist: The following procedures were performed to check the content analysis checklist reliability:

First: A pilot study consisting of six theses was identified. The theses were selected randomly from out of those conducted at the Department of Curriculum and Instruction at the Middle East University, forming 8% of all conducted theses.

Second: The researcher, along with another researcher specialized in measurement and evaluation, was asked to analyze these theses by using the content analysis checklist under study to monitor the thematic and methodological approaches in each of them.

Third: Data were collected from each researcher. The agreement and disagreement percentages between the two responses were calculated to calculate the reliability coefficient in the thematic and methodological approaches and the instrument, as a whole, by using the following Cooper equation. Cooper (1980) shows that the instrument has acceptable reliability if the reliability coefficient is greater than or equal to 0, 80.

$$Reliability\ Coefficient = \frac{N1}{N1 + N2} \times 100\%$$

N1: Number of Agreed Paragraphs in the two analyses, N2: Number of Disagreed Paragraphs in the two analyses. Table (4) shows the reliability coefficients of the content analysis checklist, as a whole, and according to its thematic and methodological domains.

Table 4. The reliability coefficients of the content analysis checklist

Domain	Theme	First Analysis		Second Analysis	Agreed Points	Disagreed Points	Reliability Coefficient
Thematic Approaches	Teaching Curriculum Stages	Kindergarten	1	1	1	0	86%
		Primary stage	4	3	3	1	
		Secondary stage	1	2	1	1	
		Higher education	1	0	0	1	
		Total	7	6	6	1	
	Cognitive Themes	Curriculum planning and development	1	1	1	0	89%
		Curriculum Analysis	0	0	0	0	
		Curriculum Evaluation	4	3	3	1	
		Curriculum Design	1	1	1	0	
		Learning and Teaching Strategies	3	3	3	0	
		Total	9	8	8	1	
	Total	16		14	14	2	88%
Methodological Approaches	Methodology	Quantitative Methods	6	5	5	1	82%
		Research Design	9	7	7	2	
	Population and Sampling	Sampling	5	6	5	1	
	Research Instruments	Instrument Type	8	10	8	2	
		Validity	7	6	6	1	
		Reliability	6	5	5	1	
	Data Analysis	Qualitative Analysis	1	0	0	1	
		Quantitative Analysis	13	10	10	3	
	Referencing	Referencing Type	19	21	19	2	
	Total	74		70	65	14	
Overall		90		84	79	16	83%

Table (4) shows that the total agreement percentages (reliability coefficient) were 88% for the thematic approaches. The methodological reliability coefficients reached 82% while the general reliability of the instrument, as a whole, reached 83%. This indicates that the analysis card of the approaches, according to Cooper standard, has an acceptable reliability percentage on the thematic and methodological levels as well as the instrument, as a whole. This makes the instrument usable for monitoring the thematic approaches of any university thesis in the Curriculum and instruction sector and the methodological approaches to any thesis in the cognitive domains.

Data Analysis and Processing

To answer the first and second research questions, the researchers extracted the frequencies and percentages of each variable listed in the content analysis checklist: thematic field, methodology, sample and sampling, study instruments, referencing and statistical process techniques. However, the question related to the thematic gap was answered using the gap analysis equation (repetitions differences between the data collection instrument and the approved methodological and thematic standards) in each variable under study. Nonetheless, research methodological and thematic chart (recommendations) were done according to the methodological and thematic gap results.

The study followed the following procedures to Monitor the Thematic and Methodological Approaches:

First: The supervisor conducted a training workshop to train the researcher on all the sub-fields that the analysis card consisted of, which were related to the thematic and methodological fields. It was ensured that the researcher understood each sub-field.

Second: All indicators related to each sub-field were agreed upon. They were to be used to judge the inclusion of each part in each thesis.

Third: The researcher created an excel file specialized in coding and filling the results of the analysis observed through the analysis card of each thesis. It was revised by the supervisor and a specialist in measurement and evaluation to check its effectiveness and practical usability till it became ready to use.

Fourth: The supervisor conducted a training workshop to make sure the researcher's ability to monitor the thematic and methodological approaches and fill them in an excel file. This was done by practically applying it to three theses selected randomly. Analysis, filling, and coding were performed step by step until it was ensured that the researcher mastered the method.

Fifth: The researcher started to analyze all the theses conducted at the Department of Curriculum and Instruction at the Middle East University in consultation with the supervisor, who was kept abreast of unclear issues encountered during the analysis.

Sixth: After finishing the analysis, the supervisor took a random sample of 10% of the theses that the researcher analyzed and verified the analysis process thematically and methodologically. The process showed high validity and reliability of the results.

Seventh: The supervisor gave another random sample of the analyzed theses, at the rate of 30%, and the analysis file to three professors specialized in Curriculum and instruction to verify the thematic approaches, and two expert professors specialized in measurement and evaluation to verify the methodological approaches. The aim was to triple the process of the results' verification. The thematic and methodological verification showed the validity and reliability of the researcher's analysis.

Study Procedures

To answer the study questions and achieve its goals, the procedures below were to be followed:

- Determining research methodology: Qualitative methodology based on content analysis.
- Determining study population, sample, and sampling: All master's theses in Curriculum and instruction.
- Preparing research instrument: Content analysis checklist according to the literature review and the specialists' opinions.
- Checking the validity of the instrument: Evaluation of it by Curriculum and instruction and statistics specialists.
- Checking the reliability of the instrument: Analyzing 8% of the target theses at two intervals and calculating the reliability coefficient.
- Designing the final instrument.
- Analyzing targeted theses by calculating the frequencies and percentages for each study variable.
- Determining the methodological and thematic approaches in the master's theses of Curriculum and instruction.
- Determining the methodological and thematic gaps and suggesting recommendations via a research chart for future studies.

CHAPTER FOUR

Results

4.1. The Thematic Approaches of the General Research of Curriculum and Instruction.

The following tables (5 and 6) shows the frequencies of thematic approaches according to curriculum stages and Cognitive Theme.

Table 5. Frequencies of Cognitive Theme of Curriculum and Instruction Theses according to Teaching Curriculum Stages

Cognitive Theme	Sub-Cognitive Theme	Frequencies
Teaching Curriculum Stages	Kindergarten	3
	Primary stage	57
	Secondary stage	16
	Higher education	3

It is noted from Table 5 that the studies focusing on kindergarten and higher education are rare since each one of them is at the rate of 4% while the majority of studies are focusing on the primary stage at the rate of 75%.

Table 6. Frequencies of Cognitive Theme of Curriculum and Instruction Theses

Cognitive Theme		Frequencies
Curriculum planning and development		7
Curriculum Analysis		2
Curriculum Evaluation	Evaluation Methods	4
	The Suitability of the Curriculum for Learners	10
	Teaching performance	28
	Total	42
Curriculum Design		1
Learning and Teaching Strategies		39

It is seen from Table 6 the studies that handled the curriculum design and the studies that handled the curriculum analysis were rare as they were at the rate of 1%, 4% respectively. Furthermore, the highest proportion of studies revolved around the curriculum evaluation at the rate of 55%, followed by the studies that handled the learning and teaching strategies at the rate of 51%. It is worth mentioning that the highest proportion of the studies that focused on the curriculum evaluation is in the teaching performance field at the rate of 37%.

4.2. The Methodological Approaches of the General Research of Curriculum and Instruction.

The tables (7-17) shows the frequencies of methodological approaches according to Methodology and variables, population and sampling, Instruments, Processing data and referencing.

4.2.1. Methodological Approaches of the General Research of Curriculum and Instruction in Term of Variables and Methodology

The tables (7-9) shows the frequencies of methodological approaches according to Methodology, variables and study design

Table 7. Frequencies of Curriculum and Instruction Theses Methodology

Methodology	Frequencies
Qualitative Method	0
Quantitative Method	76
Mixed Method	0

It is seen from Table 7 that there are no studies that followed the qualitative methodology as all studies are focused on the quantitative methodology.

Table 8. Frequencies of Curriculum and Instruction Theses Variables

Field	Sub-Field	Frequencies
Number of Variables	One Variable	1
	Two Variables	6
	Three Variables	30
	More than three	39
Variables Domain	Curriculum	13
	Teacher	44
	Learner	28
	Teaching-Learning Environment	0
	Other	7

It is noted from Table 8 that almost half of the studies at the rate of 51% handled more than three variables. The highest proportion of the studies focused on the variable of the teachers at the rate of 58%, followed by the variable of the learners at the rate of 39%, then the curriculum at the rate of 17%. There are no studies that handled the teaching-learning environment as a study variable.

Table 9. Frequencies of Curriculum and Instruction Theses Study Design

Field	Sub-Field	F	Field	Sub-Field	F
Experimental/Quasi-Experimental Design	One-shot pretest- post-test	1	Descriptive Design	Content Analysis	2
	Static group pretest- post-test	22		Survey study	47
	More than two Groups pre-and post-test	0		Correlational study	4
	One-shot posttest only	0		Comparative study	0
	Factorial Design	0		Case study	0
	Time Series	0		Predictive Study/ Delphi	1
	Pre-Post-Follow up test one group	0		sequences studies (growth)	0
	Pre-Post-Follow up test two group	0		Other	0
	Other	0		Total	54
	Total	23	Systematic Review Design		0

the descriptive design since 62% of the descriptive studies used the survey. However, the rest of the descriptive studies followed the analytical and correlational designs at the rate of 3%, 5%. respectively. Concerning the studies that followed the experimental and quasi-experimental design, they are at the rate of 30% and most of them (29%) followed the two groups pre-test – post-test.

4.2.2. Methodological Approaches of the General Research of Curriculum and Instruction in Term of Populations and Sampling

The tables (10-12) shows the frequencies of methodological approaches according to Population, sample and sampling.

Table 10. Frequencies of Curriculum and Instruction Theses Population

Field	Sub-Field	F
Students	School and Kindergarten	27
	college students	3
	Total	30
Teachers		44
School Administrators	Supervisors	8
	Consultant psychologist	0
	Principal	2
	Total	10
Academic and Administrator Staff (University)	Academic Staff	1
	Administrator Staff	0
	Total	1
Educational Experts at Educational Workplace		0
Curriculum and Parents	Book Content	2
	Learning- Teaching Environment	0
	Parents	1
	Total	3
Other		0

It is seen from Table 10 that the highest proportion of studies were applied to the teachers' population at the rate of 58%, followed by the learners' population at the rate of 39%. 13% of the studies were applied to the population of academic and administrator staff in the school education sector while 1% of the studies were applied to the population of academic and administrator staff in the higher education sector. 1% of the studies were applied to the parents' population. 3% of the studies used Curriculum and textbooks as the study population.

Table 11. Frequencies of Curriculum and Instruction Theses Sample

Field	Sub-Field	F
Sample Size	Less than 50	10
	51-100	18
	101-150	4
	151-200	12
	More than 200	29
	Other (Book ...)	3

Table 11 shows that the sample size in 38% of the studies was more than 200 while the sample size in the lowest proportion of the studies at the rate of 5% was between 101 and 150.

Table 12. Frequencies of Curriculum and Instruction Theses Sampling

Field	Sub-Field	F
Probability Sampling	Random	23
	Stratified	21
	Cluster	7
	Systematic	0
	Other	0
	Total	51
Non-Probability Sampling	Purposive	16
	Quota	0
	Convenience	2
	Judgmental	0
	Snowball	0
	Other	0
	Total	18
Population		6

Table 12 shows that 67% of the studies used probability sampling; 30% of which used random sampling, 27% used stratified sampling and 9% used cluster sampling. There are no studies that used systematic sampling or other types of sampling. On the other hand, 24% of the studies used non-probability sampling. The rate of the studies that used purposive sampling is 21% while the studies that used convenience sampling is 3%. Studies that used the whole population stood at the rate of 8%.

4.2.3. Methodological Approaches of the General Research of Curriculum and Instruction in Term of Instruments

The tables (13-15) shows the frequencies of methodological approaches according to Instrument sources, instrument types and instrument evaluation.

Table 13. Frequencies of Curriculum and Instruction Theses Instrument Sources

Field	Sub-Field	F
Instrument Number	One	61
	Two	15
	Three and More	0
Execution Way	Direct Execution	64
	In-Direct Execution	12
Instruments Source	Created by Author	43
	Improved Instruments	35
	Instruments Used by Previous Research	2

Table 13 shows that 80% of the studies used only one instrument in data collection. Most studies at the rate of 84% turned to the direct execution of instruments in the field. Concerning the source of the instrument, the proportions were divided between the studies in which the researcher created their instruments and the studies which started to improve the research instruments by 57% and 46%, respectively. There are no theses that relied on pre-prepared instruments.

Table 14. Frequencies of Curriculum and Instruction Theses Instrument Types

Field	Sub-Field	F
Test	Developed Test	21
	Validated Test	3
	Total	23
Questionnaire		47
Observation Card		4
Interview	Individual	1
	Focus Group	0
	Structured	0
	Semi-Structured	1
	Un-Structured	0
	Total	2
Content analysis checklist		2
Program		1
Performance Evaluation		0

Table 14 shows that approximately half of the theses at the rate of 57% used questionnaire as the data collection instrument while 32% of the theses used the test type. The rest of the rates are divided between the observation card, the interview, the content analysis checklist, and the preparation of the programs by 4%, 3%, 3% and 1% respectively.

Table 15. Frequencies of Curriculum and Instruction Theses Instrument Evaluation

Field	Sub-Field	F	Field	Sub-Field	F
Validity	Qualitative	0	Reliability	Qualitative	0
	Face Validity	52		Cronbach's alpha	58
	Content Validity	22		Half Split	12
	Constructive Validity	29		Kuder-Richardson 20-21	12
	Predictive Validity	0		Test - Retest	47
	Concurrent Validity	0		Holsti or Cober	5
	Other	0		Equivalence	0
	Not Measured	0		Other	0
				Not Measured	1

Table 15 shows that the highest proportion of studies used face validity at the rate of 68%, while 38% of the studies used construct validity and 29% used content validity. There are no studies that used any other types of validity. The table also shows that most studies used Cronbach's Alpha to measure reliability at the rate of 76% while 62% of the studies checked their instruments' reliability using test and re-test. The rest of the studies are divided between using reliability instruments like Half split, Kuder & Holsti at the rate of 16%, 16% and 7% respectively. 1% of the studies have not measured their instruments' reliability.

4.2.4. Methodological Approaches of the General Research of Curriculum and Instruction in Term of Processing Data

Table.16 show the frequencies of methodological approaches according to Processing data.

Table 16. Frequencies of Curriculum and Instruction Theses Processing Data

Field			Sub-Field	F
Qualitative Analysis			Content Analysis	0
			Grounded Theory	0
			Other	0
			Total	0
Quantitative Analysis	Descriptive Analysis		Frequencies	6
			Means and Standard Deviation	69
			Quartiles	32
			Other	0
	Inferential Analysis	Correlational Analysis	Correlation Between Multiple Variables	0
			Correlation Between Two Variables	20
			Multiple Regression	
			Chi Square	0
			Other	0
	Inferential Analysis	Deference's Analysis (Effectiveness)	T-Test	54
			One -Way ANOVA	43
			(Two/Three)—Way ANOVA	3
			Multi—Way Above (MANOVA)	2
			ANCOVA	20
			MANCOVA	2
			Post Hoc (Tukey and Scheffe)	29
			Fisher Test	2
			Other	6

Table 16 shows that none of the studies used qualitative statistical processing. In regard to the descriptive quantitative statistical processing, 91% of the studies used mean and standard deviation. 42% of the studies used quartiles while 8% used frequencies.

Concerning the correlational inferential statistical processing, all theses that used this type of processing focused on the correlational processing between two variables at the rate of 26%.

As for the inferential statistical processing related to deference or effectiveness, most studies used the t-Test in statistical processing at the rate of 71% while 57% of the studies used the one-way ANOVA. 26% of the studies used ANCOVA and 38% used the Post Hoc (Tukey & Scheffe). 4% of the studies used the two/three-way ANOVA, 3% used the multi-way above MANOVA and 3% of the theses used the Fisher Test. 8% of the theses used other types of tests that are not mentioned.

4.2.5. Methodological Approaches of the General Research of Curriculum and Instruction in Term of Referencing

Table.17 show the frequencies of methodological approaches according to Referencing.

Table 17. Frequencies of Curriculum and Instruction Theses Referencing

Field	Sub-Field	F
Referencing Language	Arabic	75
	English	75
	Other	0
Referencing Style	APA	76
	MLA	0
	Harvard	0
	Other	0
Referencing Type	Article	76
	Theses	76
	Conferences	26
	Books	76
	Electronic Sources	49
	Other	6

Table 17 shows that all theses used Arabic references and most of them used English references at the rate of 99%. On the count of the referencing style, all theses used the APA style. All theses used published research articles, theses and books in referencing. The rate of studies that used electronic sources is 64%. 34% of the studies used published conference papers in referencing, while only 8% of the studies used other sources not mentioned.

4.3. The Thematic and Methodological Gaps of the General Research of Curriculum and Instruction.

Figures (7-14) shows the thematic and methodological gaps of the general research of curriculum and instruction

4.3.1. Thematic Gaps of the General Research of Curriculum and Instruction

Figure.7 show the thematic gaps of the general research of curriculum and instruction according to cognitive theme

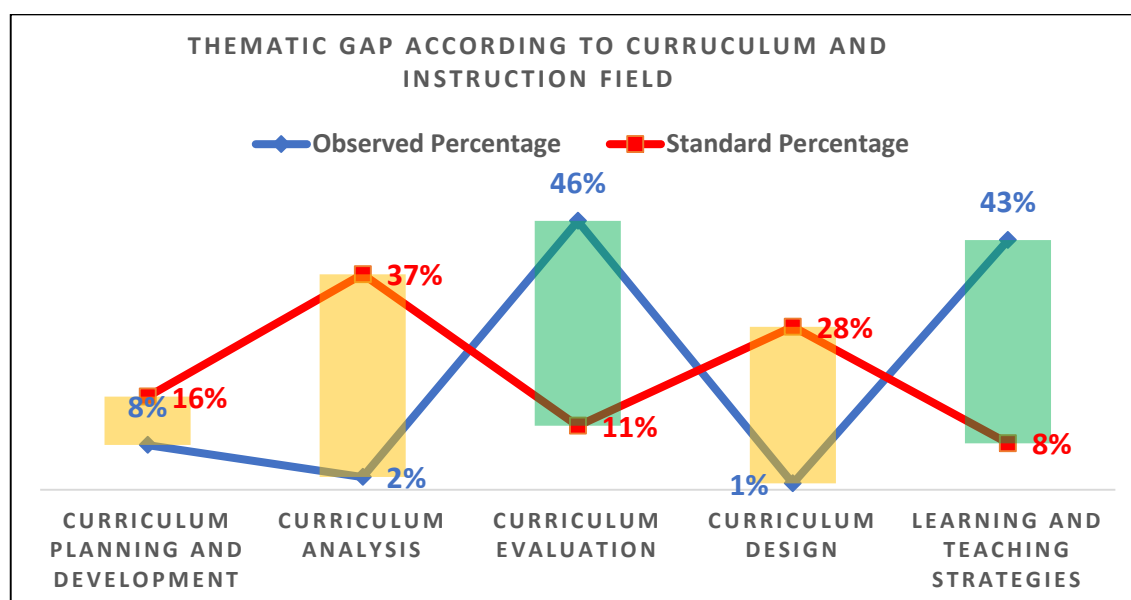


Fig 7. Thematic Gap According to Curriculum and Instruction Fields

From Figure (7) the need to direct the theses of Curriculum and instruction mainly towards the curriculum analysis is noticed as the gap between the standard approach and the theses approach reached 35%, followed by the curriculum design with a gapping percentage of 27%, and then the curriculum planning and development with a gapping percentage of 8%. On the other hand, the above figure shows that the theses written on curriculum evaluation and learning and teaching strategies have reached the saturated percentage, as both of them were at 35%.

4.3.2. Methodological Gaps of the General Research of Curriculum and Instruction in term of Methodology

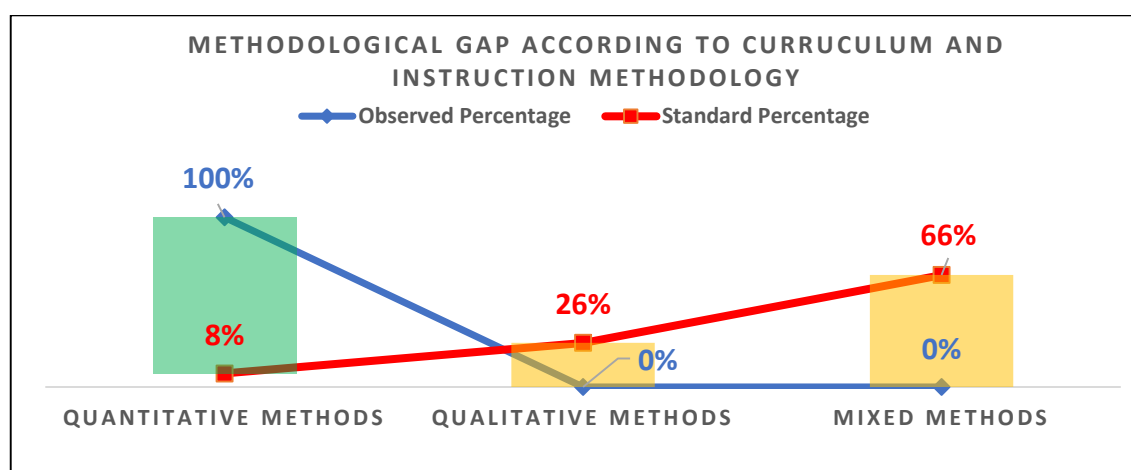


Fig 8. Thematic Gap According to Curriculum and Instruction Methodology

It is noted from Figure (8) that there is a need to approach the usage of the mixed and the qualitative methods in the theses as the gapping percentage reached 66% and 26%, respectively. Meanwhile, the figure shows that the quantitative method research have reached the saturated level at a rate of 92%. This indicates the necessity of being away from the quantitative method theses.

4.3.3. Methodological Gaps of the General Research of Curriculum and Instruction in term of study design

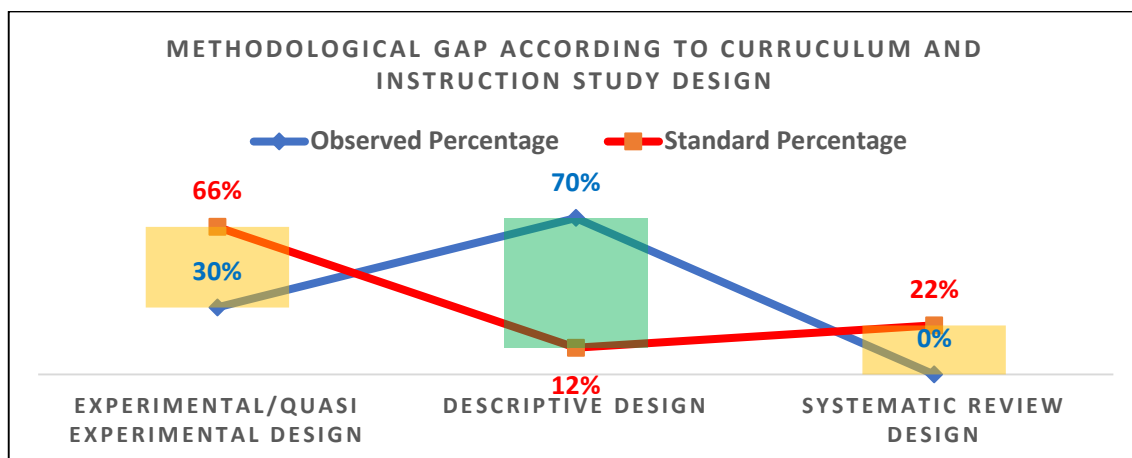


Fig 9. Thematic Gap According to Curriculum and instruction Design

It is noticed from Figure (9) the necessity of keeping the descriptive designs away from the theses as their saturated percentage reached 58%. Meanwhile, the figure shows the need to direct the theses in Curriculum and instruction towards the experimental and the quasi-experimental designs as a priority since the gapping percentage reached 36%, followed by the systematic review design with a gapping percentage of 22%.

4.3.4. Methodological Gaps of the General Research of Curriculum and Instruction in term of Sampling

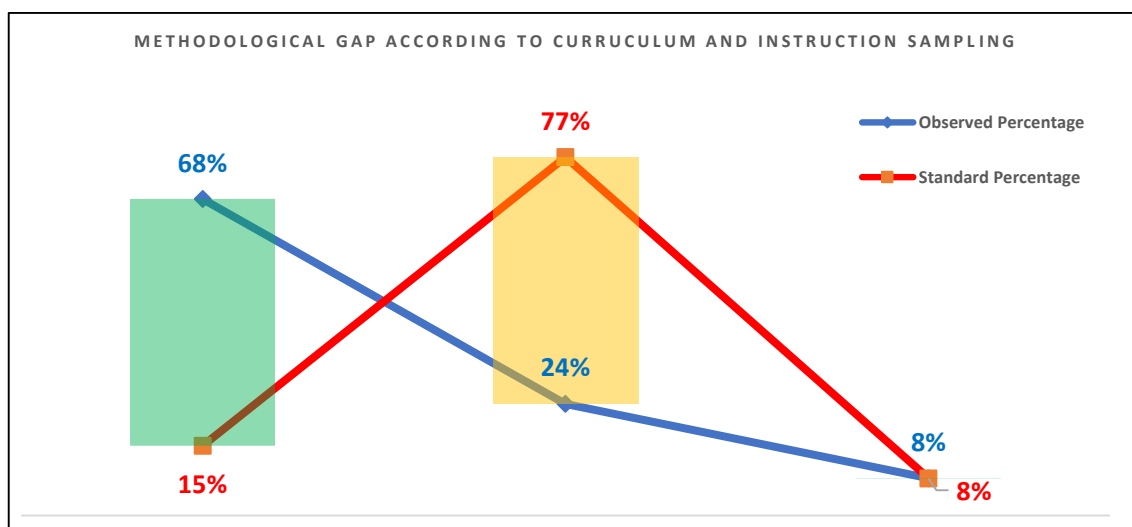


Fig 10. Thematic Gap According to Curriculum and instruction Sampling

Figure (10) shows the need to direct the theses of Curriculum and instruction towards using the non-probability sampling methods, as the gapping percentage reached 53%. In regard to the probability samples, the figure shows that international research that used the probability samples have a saturated percentage of 53%. This points to the necessity of moving away from such type of samples in the theses. On the other hand, the figure shows that theses that used the entire population as a sample were among the standard approach since the percentage of both the gap and the saturation were 0%.

4.3.5. Methodological Gaps of the General Research of Curriculum and Instruction in term of Instrument type

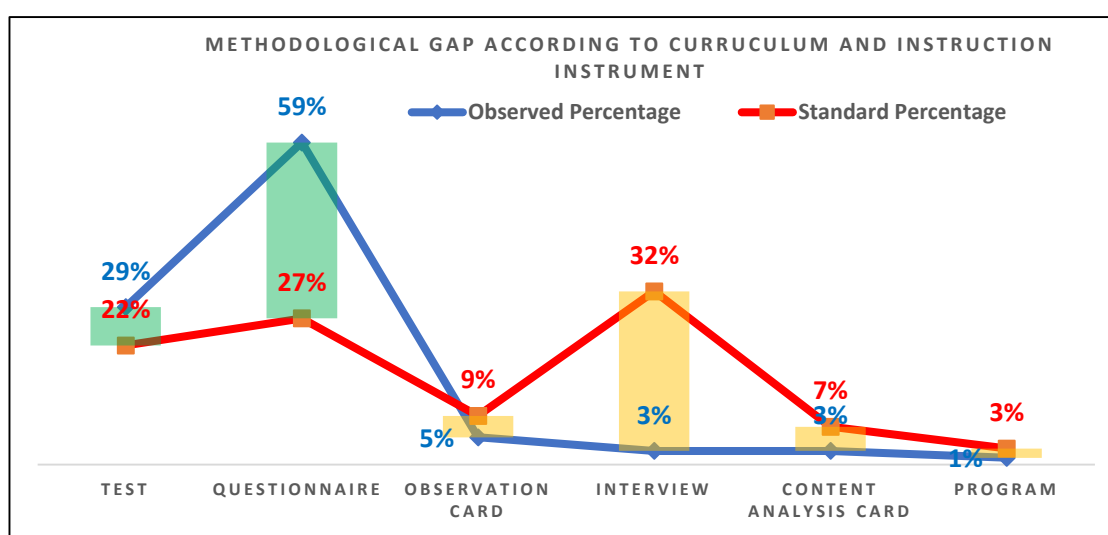


Fig 11. Thematic Gap According to Curriculum and instruction Instruments

Figure (11) shows the necessity of directing the theses in curriculum and instruction towards using interviews, content analysis checklists, observation cards, and programs as a priority as data collection instruments respectively since the gapping percentages reached (29%, 4%, 4%, and 2%). Meanwhile, the figure shows the necessity of being away from using questionnaires and tests as data collection instruments as the saturated percentages reached (32% and 7%), respectively.

4.3.6. Methodological Gaps of the General Research of Curriculum and Instruction in term of instrument evaluation

Figures(12-13) shows the methodological gaps of the general research of curriculum and instruction according to validity and reliability.

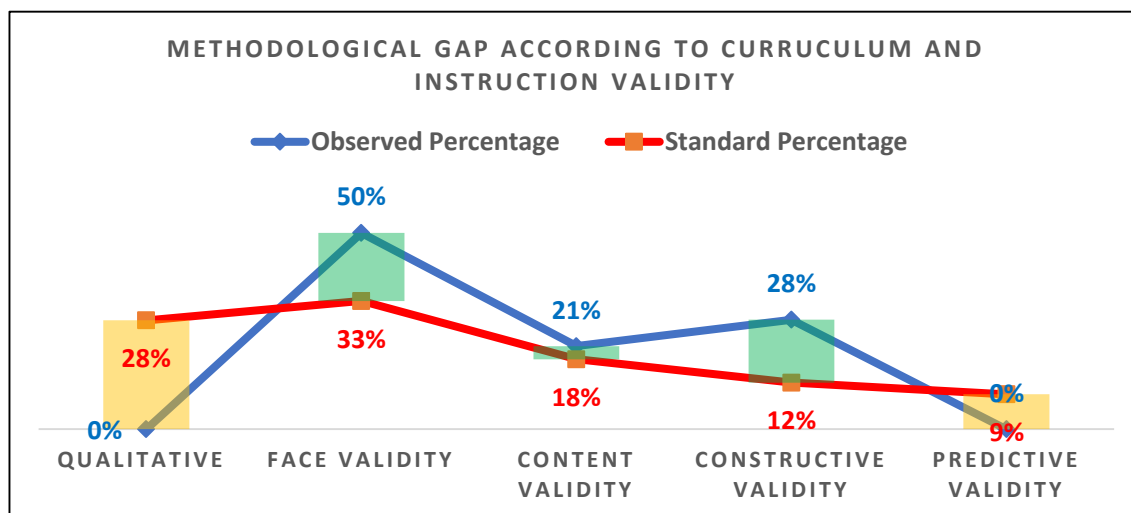


Fig 12. Thematic Gap According to Curriculum and instruction Instrument Validity

Figure (12) shows the need to direct the master's theses in Curriculum and instruction towards using the predictive and the qualitative validity to examine the data collection instruments as the gapping percentage in the qualitative validity reached 28% while the predictive validity reached 9%. On the other hand, the figure shows that each of face validity, constructive validity, and content validity were common methods used to examine the validity of the data collection instruments with saturation percentages of (17%, 16%, and 3%), respectively.

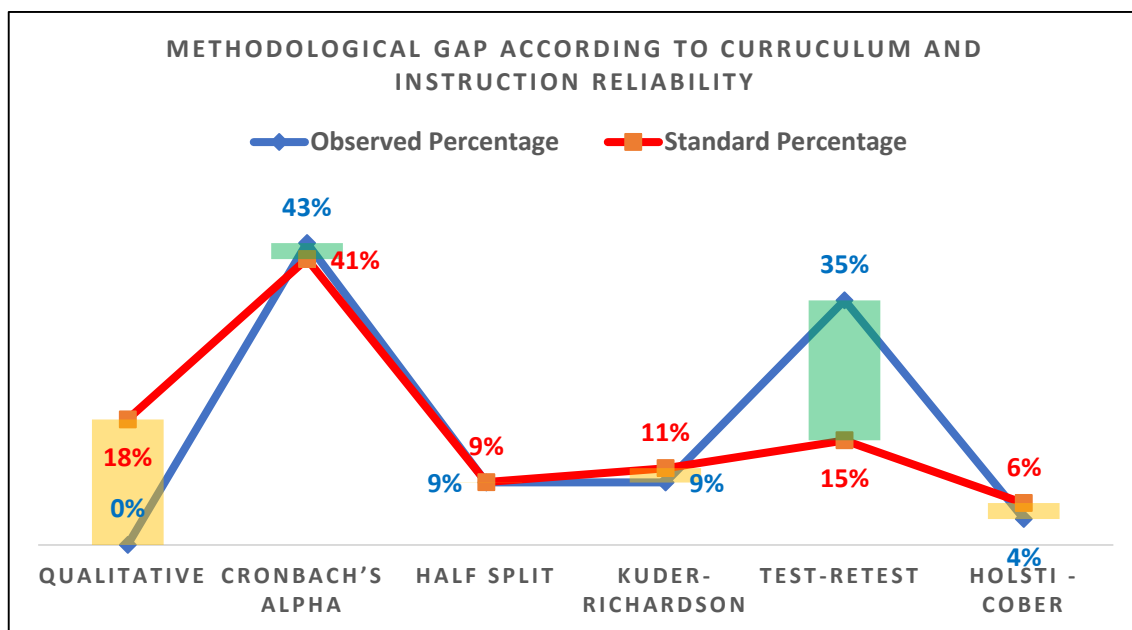


Fig 13. Thematic Gap According to Curriculum and instruction Instrument Reliability

Figure (13) shows the need to direct the master's theses in Curriculum and instruction towards using the qualitative reliability, the Holsti-Cober reliability, and the Kuder-Richardson reliability to examine the reliability of the data collection instruments, as their gapping percentages were (18%, 2%, and 2%). The above figure shows the necessity of being away from examining the reliability using both the test-retest and the Cronbach's Alpha methods because their saturated percentages reached (20% and 2%). In regard to using the half split method to examine the reliability, the figure shows that its usage was considered among the standard percentage of using the method in examining the reliability of the instruments.

4.3.7. Methodological Gaps of the General Research of Curriculum and Instruction in term of instrument referencing

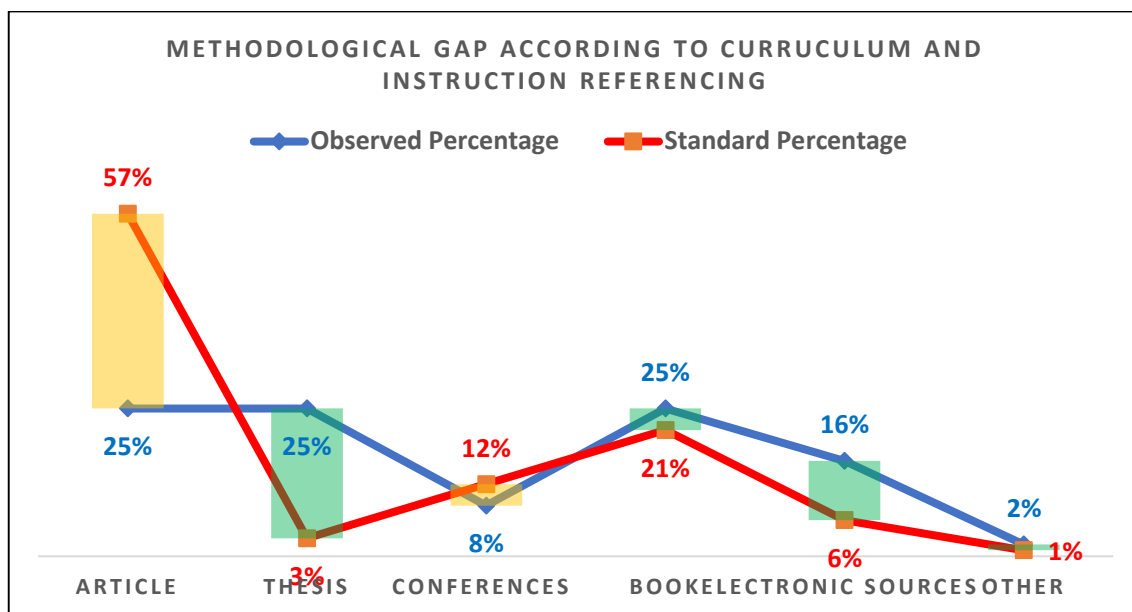


Fig 14. Thematic Gap According to Curriculum and instruction referencing

Figure (14) shows the need to direct the theses in Curriculum and instruction towards using both published research and conference papers as sources in referencing since the gapping percentages reached (32% and 4%), respectively. Furthermore, the figure shows the necessity of reducing the usage of each of university theses, electronic sources, books, and other sources as referencing since the saturated percentages reached 22%, 10%, 4%, and 1%, respectively.

CHAPTER FIVE

Discussion and Conclusions

First: Discussion and Conclusions related to the Thematic Approaches in the master's Theses of Curriculum and Instruction at Middle East University

1. The thematic approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the primary stage, according to the educational stage throughout the last five years.

This result may be attributed to the idea that the department of Curriculum and instruction focuses on the prescribed Curriculum and textbooks which are uniform nationwide. This differs from the Curriculum and textbooks prescribed in higher education where study plans, books and readings differ from one university to another and from one faculty member to another. With the same logic, kindergarten focuses on preparing children for learning, not learning itself. On the other hand, the primary stage consists of ten degrees, and this makes it a fruitful field for educational research, while the secondary stage has only two degrees. The conclusion of this study agrees with the conclusion of the (Erdogan, 2017) study which showed that most research were conducted on the students of the primary stage. This study is also consistent with the study of (Bunyamin, et al., 2017) which also showed that the majority of the research were conducted on the primary stage. However, it disagrees with the result of the (Göktaş et al., 2012) study where the subjects were mostly the university teachers and students (Al-Shaie, 2007).

2. The thematic approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the curriculum evaluation and learning and teaching strategies, according to the sub-themes throughout the last five years.

This conclusion may be attributed to the idea that the students mostly use experimental research in their theses, and this makes them turn to apply new teaching methods and strategies and discover their impact on several variables. The study plan of the Curriculum and instruction master program at Middle East University includes Teaching Strategies and it seems that it provides a collection of up-to-date strategies to students which the teaching staff urges their students to study for effectiveness and try them in classrooms. This conclusion agrees with the conclusion of the (Al-Omary & El-Nawafleh, 2011) study which showed the prevalence of the studies on the teaching strategies. It also agrees with the conclusion of the (Bunyamin, et al., 2017) study regarding curriculum evaluation.

Second: Conclusions and discussion Related to the Methodological Approaches in the master's Theses of Curriculum and Instruction at Middle East University

1. According to research methodology, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University focus on the quantitative methodology.

It may be attributed to the idea that the students are unqualified to conduct qualitative studies as they do not take courses specialized in qualitative research. Still, they take courses about the research Curriculum in general that focus on the quantitative curricula, according to the study plan of the Curriculum and instruction master's program. The result of this question partially agrees with the result of the (Erdogan, 2017), (Al-Astal, 2015)

and (Göktaş et al., 2012) studies which showed that the most common research are quantitative in nature.

2. According to fields of variables, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on teachers.

This result could be explained from the perspective that the students often turn to set a collection of demographic variables to study their impact on the main phenomenon in the study (López-ALvarado, 2017). The variables are often related to gender, qualification, specialization, and others. They believe that the more variables mentioned in the study there are, the more scientific and practical value it has (Beldage, 2016).

3. According to study design, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the descriptive design (surveys).

In general, this conclusion is attributed to the fact the descriptive method is easier to apply for students since it does not take a long time, does not require a long duration stay in the field and does not require preparation and application of specific programs. In most cases, its instruments are surveys which are easier to apply and analyze. This conclusion agrees with the conclusion of the (Al-Rumaidy, 2018) study which showed the domination of the descriptive research in the theses at the Faculty of Education, Kuwait University. It also agrees with the conclusion of the (AlArfaj, Alotaibi, & Alsmari, 2019) study which showed the prevalence of descriptive research followed by experimental research. Moreover, it agrees with the studies of (Bunyamin, et al., 2017; Al-Kathiri, 2002; Salem & EL-Bisher, 2005). It partially agrees with the study of (Al-Hareth & Al-Shahhri, 2019), which showed the prevalence of the experimental research followed by

descriptive research. This conclusion disagrees with the conclusion of the (Topal, 2020) study, which showed the prevalence of the experimental method.

4. According to population and sampling, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the teachers' population with probability sampling of random and stratified types.

This conclusion is consistent with the conclusion of (Göktaş et al., 2012) study in which mostly the university teachers and university participated.

This conclusion is explained by the researcher's concern to reach generalizations and get reliable results, and this motivated them to choose the probability sampling whether it is random, stratified or cluster. The conclusion of this question differs from the conclusion of the (Al-Astal, 2015) study, which showed the prevalence of the non-probability sampling over the probability sampling.

5. According to data collection instruments, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on using one instrument of a researcher-prepared or a developed survey.

The reason behind that may be attributed to the advantages of the questionnaire in terms of ease of preparation, application and statistical analysis and its applicability to large samples in a relatively short time. Furthermore, it is suitable for use in quantitative research, compared to qualitative research, and it is the focus of studies at college, as mentioned above. This conclusion agrees with the study of (Al-Kathiri, 2002) which showed that the most-used instrument is the questionnaire and with the studies of (Salem & EL-Bisher, 2005) and (Al-Rumaidy, 2018) which also arrived at the same results.

6. According to the evaluation of data collection instruments, the methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the face and construct validity and the test of reliability using Cronbach's Alpha.

The result of this question may be attributed to the ease of finding face validity compared with other types since it is an arbitral proceeding and does not require professional application. Furthermore, the reason why the reliability using Cronbach's Alpha coefficient is prevalent is that it is easy and does not require re-application or formation of equivalence. Besides, this equation is suitable in case the paragraphs have binary or multiple answers.

7. The methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on the descriptive analysis using mean and standard deviation, the correlational analysis using the correlation coefficient between two variables, and the deference or effectiveness analysis using *t*-Test, according to statistical processing.

Certainly, this variety of statistical procedures is due to the various methodologies used and types of research which is reflected in the nature of the research questions in each one of them. In general, this result is logical since the statistical methods and procedures suit the study problem and the nature of the research questions.

8. The methodological approaches in the master's theses of Curriculum and Instruction at Middle East University are focused on referencing using the APA style, paper-based sources, university theses and electronic books and sources, according to referencing.

This result turns back to the language type the theses is written with, which is the Arabic language, and this makes the references vary between Arabic and English. Furthermore, the guidelines for writing theses at Middle East University recommend using the APA referencing style. This conclusion agrees with the conclusion of the (Al-Rumaidy, 2018) study that showed that the use of Arabic sources ranged between 31 and 60 sources.

Third: Conclusions and Discussion Related to the Thematic and Methodological Gaps in the master's Theses of Curriculum and Instruction at Middle East University

3.1: Conclusions Related to the Thematic Gaps in the master's Theses of Curriculum and Instruction at Middle East University

- There is a thematic gap in the master's theses of Curriculum and Instruction in the following domains, respectively: Curriculumanalysis, Curriculumdesign, and Curriculumplanning and development. The lack of research that focus on Curriculumanalysis is attributed to not having enough time to complete the analyses alongside the students' poor analytical skills. Additionally, the lack of research that focus on Curriculumdesign may be attributed to the difficulty in designing content, the necessity for an experience that the master's student may not be immensely familiar with, and the difficulty in completing the design within the prescribed period of completing the thesis. In regard to the lack of theses that focus on Curriculumplanning and development, the reason may be attributed to the necessity for experts to assist students and the difficulty in making use of their expertise due to their ongoing duties. Numerous studies showed the same results, including (AlArfaj, Alotaibi, & Alsmari, 2019).

3.2: Conclusions Related to the Methodological Gaps in the master's Theses of Curriculum and Instruction at Middle East University

- There is a methodological gap in the master's theses of Curriculum and Instruction in the quantitative and qualitative mixed-method, than the qualitative method.

This result is consistent with several studies, including (Erdogan, 2017), (Egmir, et al., 2017; Chaiyasook & Jaroongkongdoch, 2014). It concluded that the majority used the quantitative method in the theses of education sciences in general and Curriculum and instruction in specific. This is attributed to the ease of data collection, analysis, and processing when using the quantitative method. This is because the researcher does not need clever guesswork when using the quantitative method compared with the mixed or qualitative methods that need high skill and accuracy (Berg & Haward, 2012). In addition, mixed and qualitative methods take a lot of time in analyzing and processing data. Furthermore, the supervisors do not direct the researchers towards using the standard approaches. This maybe because the research practices of the supervisors themselves focus on the quantitative method and some of them believe that the mixed and qualitative methods are less valid and reliable than the quantitative method.

- There is a methodological gap in the theses of Curriculum and Instruction in terms of using the experimental and the quasi-experimental designs as a priority, then the systematic review designs. Results showed that descriptive designs reached the saturation percentage in theses. This may be attributed to the quality of the descriptive method to provide accurate data of a problem on the ground and be less complicated (Ary, et al., 2010). This explains the approach for using the descriptive design over the experimental, quasi-experimental, and systematic review designs.

On the other hand, the reason why the experimental and the quasi-experimental designs are kept away may be attributed to their dependence on experimental groups and on applying the study within a prescribed period. This needs full cooperation and approvals by the education authority with which the study sample is affiliated and this is a limiting factor since the education authority has priorities other than the research itself. However, the reason for keeping the systematic-review-related designs away is that this type of design requires knowledge way beyond the master's students ability and scope (Lune & Berg 2017).

- There is a methodological gap in the theses of Curriculum and Instruction in terms of the non-probability sampling methods and the use of the entire population as a study sample. This may be attributed to the fact that the opportunity of selecting the sample members in the non-probability sampling is unknown since there is an exclusion to and inclusion of members and, therefore, the population does not have an equal opportunity for being included in the sample (Etikan & Bala, 2017). Thus, its results represent sample units and not the entire population. On the contrary, each member in probability sampling has the opportunity to be included in the sample. Therefore, probability sampling is less prone to bias, and its results can be disseminated to the entire population (Taherdoost, 2016).
- There is a methodological gap in the theses of Curriculum and Instruction in terms of using interviews, content analysis checklists, and observation cards. In regard to the methodological gap in interviews, it is attributed to the fact that interviews require the researcher's practice and training. This practice and knowledge might not exist with students at the master's level. Additionally, interviews take a lot of time and effort since each interview must be conducted individually and the data

need to be transcribed. Besides, it is difficult to perform quantitative analyses on them, especially in unstructured interviews (Cohen, et al., 2019). Regarding the gap in using content analysis checklists, it is attributed to a large amount of time demanded by content analysis. In addition, the master's student lacks the skill required to explain and analyze the content and may not be competent to examine the validity of the results on their own. The methodological gap related to the usage of the observation card instrument is attributed to the students not having enough time, the high cost, and the high skill required by this type of instrument (Nassaji, 2015).

- There is a gap in the theses of Curriculum and Instruction in terms of using predictive and qualitative validity as ways to examine the validity of the data collection instruments. This gap is attributed to the researchers being away from qualitative instruments, thus not allowing to examine the validity of the quantitative instruments using the predictive and the qualitative validity (Bist, 2014).
- There is a methodological gap in the theses of Curriculum and Instruction in terms of using the quantitative reliability of the Holsti-Cober reliability, and the Kuder-Richardson reliability to examine the reliability of the data collection instruments. The instruments that the researcher uses are quantitative, and their reliability cannot be examined by the qualitative reliability (Jackson, et al., 2007).
- There is a gap in the theses of Curriculum and Instruction in terms of using published research and conference papers in referencing. This type of research may not be readily available to the researcher since universities subscribed to limited databases that do not allow access to this type of research. Therefore, students approach the research available at the university, in the databases provided by the

university, or on search engines. The study of (Al-Rumaidy, 2018) also reached this finding.

Recommendations

In the light of the above-mentioned conclusions, this study recommends the following:

1. Guiding students to conduct qualitative studies, whether it is content analysis, a case study or otherwise.
2. Guiding students to consider the research issues of top priorities according to the latest reports issued by related authorities.
3. Employing various research instruments like tests, content analysis and interviews as these instruments provide a deep understanding of the phenomenon.
4. Encouraging students to adopt various research problems related to curriculum planning, development, and evaluation.
5. Conducting further research on scientific studies and theses in other educational specializations and comparing them.

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Appendices

Appendix A: Content analysis checklist

Content Analysis Card	
G	General Characteristics
Title	
Author	
Language	<input type="checkbox"/> Arabic <input type="checkbox"/> English
Year	<input type="checkbox"/> 2015-2016 <input type="checkbox"/> 2016-2017 <input type="checkbox"/> 2017-2018 <input type="checkbox"/> 2018-2019 <input type="checkbox"/> 2019-2020
T	Thematic Approaches The Cognitive Themes of Curriculum and Instruction Domain
<input type="checkbox"/>	Teaching Curriculum Stages <input type="checkbox"/> Kindergarten <input type="checkbox"/> Primary stage <input type="checkbox"/> Secondary stage <input type="checkbox"/> Higher education
<input type="checkbox"/>	Curriculum planning and development
<input type="checkbox"/>	Curriculum Analysis
<input type="checkbox"/>	Curriculum Evaluation
	<input type="checkbox"/> Evaluation Methods <input type="checkbox"/> The Suitability of the Curriculum for Learners <input type="checkbox"/> Teaching performance
<input type="checkbox"/>	Curriculum Design
<input type="checkbox"/>	Learning and Teaching Strategies

Content Analysis Card	
M	Methodological Approaches
M1	Methodology

M1-1	Variables
<input type="checkbox"/>	Number of Variables <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> More than three
<input type="checkbox"/>	Variables Domain
	<input type="checkbox"/> Curriculum <input type="checkbox"/> Teacher <input type="checkbox"/> Learner
	<input type="checkbox"/> Teaching-Learning Environment <input type="checkbox"/> Other

M1-2	Methodology
<input type="checkbox"/>	Qualitative Method <input type="checkbox"/> Quantitative Method
<input type="checkbox"/>	Mixed Method

M1-3	Research Design
<input type="checkbox"/>	Experimental/Quasi Experimental Design
	<input type="checkbox"/> Before -After One Group <input type="checkbox"/> Before -After two Group <input type="checkbox"/> Before -After more than two Group <input type="checkbox"/> After One Group
	<input type="checkbox"/> After two Group <input type="checkbox"/> Time Series <input type="checkbox"/> Before -After (Continuous) One Group
	<input type="checkbox"/> Before -After (Continuous) two Group <input type="checkbox"/> Other
<input type="checkbox"/>	Descriptive Design
	<input type="checkbox"/> Content Analysis <input type="checkbox"/> Survey study <input type="checkbox"/> Correlational study <input type="checkbox"/> Comparative study <input type="checkbox"/> Case study
	<input type="checkbox"/> Predictive Study/ Delphi <input type="checkbox"/> sequences studies (growth) <input type="checkbox"/> Other
<input type="checkbox"/>	Systematic Review Design

Page 2

Content Analysis Card	
M	Methodological Approaches
M2	Population and Sampling

M2-1	Population
<input type="checkbox"/>	Students
	<input type="checkbox"/> School and Kindergarten <input type="checkbox"/> college students
<input type="checkbox"/>	Teachers
<input type="checkbox"/>	School Administrators
	<input type="checkbox"/> Supervisors <input type="checkbox"/> Consultant psychologist <input type="checkbox"/> Principal
<input type="checkbox"/>	Academic and Administrator Staff (University)
	<input type="checkbox"/> Academic Staff <input type="checkbox"/> Administrator Staff
<input type="checkbox"/>	Educational Experts at Educational Workplace
<input type="checkbox"/>	Curriculum and Parents
	<input type="checkbox"/> Book Content <input type="checkbox"/> Learning- Teaching Environment
	<input type="checkbox"/> Parents
<input type="checkbox"/>	Other

M2-2	Sample
<input type="checkbox"/>	Less than 50 <input type="checkbox"/> 51 - 100 <input type="checkbox"/> 101 - 150
<input type="checkbox"/>	151 - 200 <input type="checkbox"/> More than 200
<input type="checkbox"/>	Other (Book ...)

M2-3	Sampling
<input type="checkbox"/>	Probability Sampling
	<input type="checkbox"/> Random <input type="checkbox"/> Stratified <input type="checkbox"/> Cluster
	<input type="checkbox"/> Systematic <input type="checkbox"/> Other
<input type="checkbox"/>	Non-Probability Sampling
	<input type="checkbox"/> Purposive <input type="checkbox"/> Quota <input type="checkbox"/> Convenience
	<input type="checkbox"/> Judgmental <input type="checkbox"/> Snowball <input type="checkbox"/> Other
<input type="checkbox"/>	Population

Page 3

Content Analysis Card

M	Methodological Approaches	M3 Research Instruments
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> M3-1 Instruments Number <input type="checkbox"/> One Instrument <input type="checkbox"/> Two Instruments <input type="checkbox"/> Three Instruments and more </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> M3-3 Execution Way <input type="checkbox"/> Direct Execution <input type="checkbox"/> In-Direct Execution (Electronic) </div> <div style="border: 1px solid black; padding: 5px;"> M3-4 Instrument Type <input type="checkbox"/> Test <input type="checkbox"/> Developed Test <input type="checkbox"/> Validated Test <input type="checkbox"/> Questionnaire <input type="checkbox"/> Observation Card <input type="checkbox"/> Interview <input type="checkbox"/> Individual <input type="checkbox"/> Focus Group <input type="checkbox"/> Structures <input type="checkbox"/> Semi-Structures <input type="checkbox"/> Un-Structures(Open Ended) <input type="checkbox"/> Content Analysis Card <input type="checkbox"/> Program <input type="checkbox"/> Performance Evaluation Card </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> M3-2 Instruments Source <input type="checkbox"/> Created By Author <input type="checkbox"/> Improved Instruments <input type="checkbox"/> Instruments Used By Previous Research </div> <div style="border: 1px solid black; padding: 5px;"> M2-5 Instrument Evaluation <input type="checkbox"/> Validity <input type="checkbox"/> Qualitative <input type="checkbox"/> Face Validity <input type="checkbox"/> Content Validity <input type="checkbox"/> Constructive Validity <input type="checkbox"/> Predictive Validity <input type="checkbox"/> Concurrent Validity <input type="checkbox"/> Other <input type="checkbox"/> Not Measured <input type="checkbox"/> Reliability <input type="checkbox"/> Qualitative <input type="checkbox"/> Cronbach's alpha <input type="checkbox"/> Half Split <input type="checkbox"/> Kuder-Richardson 20-21 <input type="checkbox"/> Test - Retest <input type="checkbox"/> Equivalence <input type="checkbox"/> Holsti-Koper <input type="checkbox"/> Other <input type="checkbox"/> Not Measured </div>

Page 4

Content Analysis Card

M	Methodological Approaches	M4 Data Analysis
		<div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Qualitative Analysis <input type="checkbox"/> Content Analysis <input type="checkbox"/> Grounded Theory <input type="checkbox"/> Other <input type="checkbox"/> Quantitative Analysis <input type="checkbox"/> Descriptive Analysis <input type="checkbox"/> Frequencies <input type="checkbox"/> Means and Standard Deviation <input type="checkbox"/> Quartiles <input type="checkbox"/> Other <input type="checkbox"/> Inferential Analysis <input type="checkbox"/> Correlational Analysis <input type="checkbox"/> Correlation Between Multiple Variables <input type="checkbox"/> Correlation Between Two Variables <input type="checkbox"/> Multiple Regression <input type="checkbox"/> Qi Square <input type="checkbox"/> Other <input type="checkbox"/> Deference's Analysis (Effectiveness) <input type="checkbox"/> T-Test <input type="checkbox"/> One -Way Above <input type="checkbox"/> (Two/Three)–Way Above <input type="checkbox"/> Multi–Way Above (MANOVA) <input type="checkbox"/> ANCOVA <input type="checkbox"/> MANCOVA <input type="checkbox"/> Post Hoc (Tuky and Scheffe) <input type="checkbox"/> Fisher Test <input type="checkbox"/> Other </div>

M	Methodological Approaches	M5 Referencing
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> M5-1 Referencing Language <input type="checkbox"/> Arabic <input type="checkbox"/> English <input type="checkbox"/> Other </div> <div style="border: 1px solid black; padding: 5px;"> M5-2 Referencing Type <input type="checkbox"/> Article <input type="checkbox"/> Thesis <input type="checkbox"/> Conferences <input type="checkbox"/> Books <input type="checkbox"/> Electronic Sources <input type="checkbox"/> Other </div>	<div style="border: 1px solid black; padding: 5px;"> M5-2 Referencing Style <input type="checkbox"/> APA <input type="checkbox"/> MLA <input type="checkbox"/> Harvard <input type="checkbox"/> Other </div>

Page 5

Appendix B: Ethical Approval Form for Research Results



Middle East University
Deanship of Graduate Studies
Academic Research Committee

Results Verification form

Date : 1 / 5 / 2021

Please complete all parts of the form and append consent form(s), information sheets, and any other materials in support of your application.

1. Thesis Title	The Thematic and Methodological Approaches in master's Theses at Middle East University in Jordan
Name of researcher(s)	<p style="text-align: center;">Asalah Ahmad Abu Aser, Department of Administration and Curricula Faculty of Educational Sciences, Middle East University, Amman, Jordan</p> <p style="text-align: center;">Supervisor Ahmad A. S. Tabieh, Department of Administration and Curricula Faculty of Educational Sciences, Middle East University, Amman, Jordan atabieh@meu.edu.jo</p>

Section 1: Verification Statement:

	Question	Confirmed	By
1	The Thematic Approaches results has been founded by Researcher (First Round)	yes	Asalah Ahmad Abu Aser
2	The Thematic Approaches results has been screen by supervisor (Second Round)	yes	Dr.Ahmad A.S.Tabieh
3	The Thematic Approaches results has been varified by three experts in Curruculm and Instructions field (Final Round)	yes	Prof.Hamid Al-Abbadi Prof.Elham Al-Shalabi Dr.Othman Mansreh
4	The Methodologicalc Approaches results has been founded by Researcher (First Round)	yes	Asalah Ahmad Abu Aser
5	The Methodologicalc Approaches results has been screen by supervisor (Second Round)	yes	Dr.Ahmad A.S.Tabieh
6	The Methodologicalc Approaches results has been varified by two experts in Evaluation and Macasurment field (Final Round)	yes	Prof.Ferial Abu-Awwad Dr.Basil Foudeh

7	The Standard methodological measurments has been detected by supervisor and professors in evaluation and measurment field through scopus portal	yes	Prof.Ferial Abu-Awwad Dr.Basil Foudeh Dr.Ahmad Tabieh
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Section 2 : Applicant's Statement :

I undertake to carry out research in accordance with **Academic Research Committee** (ARC) ethics policy and to inform the FD ARC of any changes to the protocol of this project.

Applicant(s)

Signed: Ferial Print Name : Prof. Ferial Abu-Awwad Date : 8.5.2021
 Signed: Elham Print Name : Prof. Elham Al-Shalabi Date : 8.5.2021
 Signed: Hamid Print Name : Prof. Hamid Al-Abbadi Date : 8.5.2021
 Signed: Basil Print Name : Dr.Basil Foudeh Date: 8.5.2021
 Signed: Othman Print Name : Dr.Othman Mansreh Date: 8.5.2021
 Signed: Tabieh Print Name : Dr.Ahmad A.S.Tabieh Date: 8.5.2021
 Signed: ASALAH Print Name : Asalah Ahmad Abu Aser Date : 8.5.2021

Section 3 : Statement of Decision :

Recommendations of the committees	
This Results has been Valid and Reliable by the Experts Committee , and Is now :	
<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected	
<input type="checkbox"/> Reasons for rejection :	